

US Army Corps of Engineers

Construction Engineering Research Laboratories

USACERL Technical Report 98/97 June 1998

Fort Myer, Virginia: Historic Landscape Inventory

by Samuel A. Batzli

Fort Myer, Virginia, holds a central place in the history of the Army. Part of the fort is designated as a Historic District under the National Register of Historic Places.

The goal of this research was to develop a statement of the historic context for Fort Myer, based on military missions, activities, historical associations, and periods of development. By integrating literature reviews, archival reviews, and site visits, the statement identifies the most important historical areas and landscape characteristics within the installation. It can be used (1) to help guide future adjustments of the Historic District boundary to include previously overlooked significant landscapes or to exclude areas lacking significance and/or integrity, and (2) to provide guidance for the development of a historic landscape management plan.

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Form Approved OMB No. 0704-0188

NEPONI D	OCCIVIENTATION	PAGE	OMB No. 0704-0188
gathering and maintaining the data needed, a collection of information, including suggestion	and completing and reviewing the collection of	f information. Send comments re adquarters Services, Directorate	reviewing instructions, searching existing data sources, agarding this burden estimate or any other aspect of this for information Operations and Reports, 1215 Jefferson Project (0704-0188), Washington, DC 20503.
AGENCY USE ONLY (Leave Blank)	2. REPORT DATE June 1998	3. REPORT TYPE AND DAT Final	ES COVERED
4. TITLE AND SUBTITLE Fort Myer, Virginia: Historic I	Landscape Inventory		5. FUNDING NUMBERS Reimbursable Order No. GC7
6. AUTHOR(S) Samuel A. Batzli			
7. PERFORMING ORGANIZATION NAME(S	S) AND ADDRESS(ES) eering Research Laboratories (US	CACERI)	8. PERFORMING ORGANIZATION REPORT NUMBER
P.O. Box 9005 Champaign, IL 61826-9005	zeimg Researen Lacoratories (S.	ACEAL)	TR 98/97
9. SPONSORING / MONITORING AGENCY U.S. Army Environmental Cent ATTN: SFIM-AEC-ENC Environmental Compliance Div Aberdeen Proving Ground, MD	vision		10. SPONSORING / MONITORING AGENCY REPORT NUMBER
11. SUPPLEMENTARY NOTES Copies are available from the N	National Technical Information Se	ervice, 5285 Port Royal	Road, Springfield, VA 22161.
12a. DISTRIBUTION / AVAILABILITY STATE	EMENT		12b. DISTRIBUTION CODE
Approved for public release; dis	stribution is unlimited.		
13. ABSTRACT (Maximum 200 words) Fort Myer, Virginia, holds a cen under the National Register of F	ntral place in the history of the Ar Historic Places.	rmy. Part of the fort is d	lesignated as a Historic District
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14. SUBJECT TERMS Fort Myer, VA	Military installation	15. NUMBER OF PAGES 70	
Historic preservation Historic buildings		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT SAR

Foreword

This study was conducted for the U.S. Army Environmental Center (AEC) under Military Interdepartmental Purchase Request (MIPR) 0647; Work Unit GC7, "Historic Landscape Inventories and Master Plans for Army Installations." The technical monitor was David Guldenzopf, SFIM-AEC-ENC.

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Executive Summary

This report provides an historical context for Fort Myer, Virginia that emphasizes historical changes in its landscape. Its goal is to identify the different stages of landscape change as defined by military mission and historical process. This information is valuable because it 1) enables the establishment of accurate historic district boundaries; and 2) provides guidance for the development of a historic landscape management plan.

The analysis of the information collected about Fort Myer resulted in a general outline of the history of the installation that is divided into four parts:

- 1. Mt. Washington and the Arlington Estate 1802-1861
- 2. Civil War: Forts Cass and Whipple 1861-1865
- 3. Signal Corps School 1869-1887
- 4. Cavalry Show Place 1887-1942

Through the use of historical photographs and maps, this report reconstructs the landscape of Fort Myer during these time periods and documents changes over time. Surviving historic landscape areas are identified and described as they appear today. They include the following:

- Site of Grant Avenue Quarters and Whipple Field: site of first officers' quarters; view to Washington, DC important for signal practice; site of entrance to Civil War Fort Whipple (1863).
- First Parade Ground/Officers' Recreation Area: parade ground of the Signal Corps; area now occupied by tennis courts
- The Lower Post Area: originally built as a Signal Corps cantonment between 1899 and 1910; site of a tall "Balloon House" for observation balloons; from 1931 to the 1940s became home to the Machine Gun Troop of the 10th Cavalry, a unit of black soldiers.
- Pasture/Picnic Area: used as an area to exercise horses; current road bed originally built and used by the Washington Arlington & Falls Church Railway, an electric passenger train service that operated from the late 1890s into the 1930s.
- Stables Area: site of civil War Fort Cass, built in 1861; stables built in the 1890s and 1900s after the Army designated Fort Myer a cavalry post.
- Summerall Field / Wright Brothers site: today represents the north end of what was a much larger historic training area; site of the 1908 and 1909 Wright Brothers airplane trials; currently used as a parade ground and ceremonial space.
- Lee Avenue Officers' Quarters: most of the buildings on the east side of the street date 1896, those on the east side to the 1930s; it is noteworthy that the 1896 buildings face the street and not the parade ground (Summerall Field), as is more common of Army installations of that time period; as a result, Lee Avenue possesses a more urban, residential character.
- Whipple Field Officers' Quarters: constructed of brick, Quarters 1 and 2 date to 1899 and were originally the commanding officer's quarters for the Signal Corps cantonment of the Lower Post. Quarters 5 and 8 date to 1903, Quarters 6 and 7 date to 1908 and 1909 respectively. When built, Quarters 5 through 8 replaced a row of five frame quarters, four of which had stood since 1876. In 1910, Quarters 1 became home to the Army Chief of Staff.
- Jackson Avenue Quarters: officer housing built directly on the site of Fort Whipple between 1892 and 1908; recreation area to the north occupies the site of Fort Whipple (1863), later the parade ground for the first Signal Corps cantonment (1868-1886).
- Barracks Area: the first two buildings to the north, 246 and 247, date to 1895, the nest two, 248 and 249 the date to 1903, buildings 250 dates to 1908 followed by building 251 which dates to 1934.
- NCO Housing Area: a continuation of the urban aesthetic along Sheridan Avenue. Sidewalks and street
 trees create a visual link with the barracks area. These buildings represent the 1930s New Deal construction
 boom on Army installations.

This report comments on the existing and proposed National Register Historic District boundaries. It demonstrates the significant relationship between the natural topography and the general plan of the post.

Furthermore, this report describes certain areas crucial to understanding the historical character and setting of Fort Myer that are not included in the current historic district boundary.

Introduction

Fort Myer holds a central place in the history of the Army. Many important individuals, units, and events are associated with the post. As home of the Army Chief of Staff, many of the Nation's most famous Army Generals, including Douglas MacArthur, George C. Marshall, Dwight D. Eisenhower, and Omar Bradley, lived at Fort Myer during their service. Notable historical Army units include the Buffalo Soldiers of Troop K of the 9th Cavalry Regiment (1891-1894) and the Machine Gun Troop of the 10th Cavalry in the 1930s-1940s (African American segregated troops). More recently, the Army assigned the 3rd Infantry (Old Guard) and the U.S. Army Band (Pershing's Own) to Fort Myer. Important historical events closely associated with at Fort Myer include the protection of Washington, DC during the Civil War; the establishment of the Army Signal Corps; the establishment of the U.S. Weather Bureau; the Wright brothers' test flights that started Army aviation; the first aviation fatality in America (1908); and many aviation world records of endurance stemming from those flights.

Location of Study Area

Fort Myer is located in Arlington, Virginia across the Potomac River from Washington, DC. It is a crescent shaped installation that circumscribes the northern and western sides of Arlington Cemetery. During World War II, the Army expanded Fort Myer to include an area east and south of Arlington Cemetery and adjacent the Pentagon. The Army designated the area "South Post," but the current boundaries of Fort Myer no longer include that area. Today Fort Myer comprises approximately 250 acres, and is limited to the area of the original post. The study area for this report includes the central and northern portions of the installation (see Figure 1 and Figure 2).

Methodology and Tasks

The methodology used in this study is based on the publication Army Guidelines for Identifying and Evaluating the Historic Military Landscape (USACERL 1996). These guidelines call for an integrated archival and field research approach. The goal of the archival tasks is to develop a statement of historic context based on the installation's missions, primary activities, historical associations, and periods of development that will be used as a guide for determining the most important areas and landscape characteristics within the installation. The goal of the field research tasks is to identify, document, and evaluate the characteristics of the installation landscape. Researchers integrate the results of the archival and field research in order to make connections between the history of the installation and evolution of its landscape. The final step in the process involves the evaluation of the historic landscape to determine NRHP eligibility of the study area as a district or site. The study area is already designated a Historic District and the only discussion in this report involves the possible extension of portions of the boundary to include previously overlooked significant landscape areas.

Archival Research

The archival research involves several tasks. The first is the initial literature review. The second task is to identify and locate primary research materials.

Literature Review

In this task, researchers use secondary literature to familiarize themselves with the general history of the installation and the region, its natural history, and its geographical position. For Fort Myer this involved reading published material on the history of the Arlington Estate, the Civil War defense of Washington, and the natural history of the Potomac River Valley and Northern Virginia. To date, no single comprehensive history of Fort Myer has been written.

Research Material

This task involves locating primary research materials (verbal, visual, and oral) and additional secondary materials and establishing a strategy to best utilize these resources. This report is based on the collections of numerous archival resources including literature, photograph collections, maps, and even motion pictures found at the National Archives I & II, the Library of Congress, Washingtoniana Room of the Martin Luther King, Jr. Public Library, the Virginia Room of the Arlington Library. Other important sources at Fort Myer itself include the Third Infantry Museum, the Historian's Office, the Public Works Office, the Housing Office, and the post Library. The visual materials found in these locations provided access to the past landscape of Fort Myer.

Site Visits

The third task is to make site visits. These first visits are intended to familiarize the researchers with the installation and its landscape. During these trips, researchers collect archival information from the installation and make preliminary identification of historical landscape areas. At Fort Myer this involved arranging points of contact with the various offices at Fort Myer described above, touring the installation with a guide, and taking photographs of the grounds.

Analysis

The fourth task is the analysis of the information. Researchers outline the historical context for the installation, identify changes in military mission over time, identify important chronological periods, establish a geographical context, and identifying historical themes. The analysis of the information collected about Fort Myer resulted in a general outline of the history of the installation that is divided into four parts:

- 1. Mt. Washington and the Arlington Estate 1802-1861
- 2. Civil War: Forts Cass and Whipple 1861-1865
- 3. Signal Corps School 1869-1887
- 4. Cavalry Show Place 1887-1942

Field Research

The field research involves two general tasks. The first is a site visit that is accomplished in conjunction with the third archival task described above. The second task involves more rigorous fieldwork during follow-up visits.

Initial Visit

During this initial visit, the researchers perform a reconnaissance survey, or "windshield survey," of the installation. This is done by driving the roads of the installation in an effort to become familiar with the layout of the installation and to make a preliminary identification of areas of potential historical significance. At Fort Myer this involved a guided tour of the post, a start-up meeting, and several informal interviews.

Follow-up Visits

Researchers walk the grounds of the installation documenting through photography, sketching, and note taking the relationships among landscape components and landscape areas. An emphasis is placed on the identification of characteristics of the military landscape that relate to the different time periods and events identified in the archival tasks described above. For example, at Fort Myer the roads and gates to the post have been altered over time, but the general configuration of the posts dates to the 1870s. Field research identified the location of the former Tassin Gate and identified patterns concerning the relationship of officers' quarters and parade grounds, both current and historical.

Integrating Results

The methodology defined in the *Guidelines* integrates the archival and field information in a continual and dynamic way. As information is pulled from archival sources, researchers are guided to the relevant historical issues. As field research identifies specific landscape characteristics or relationships, researchers are prompted to refine their questions and look further in the archival records for answers. For example, archival information about the use of weather and observation balloons at Fort Myer prompted researchers to try to identify the location of the balloon shed. Conversely, the unconventional orientation of officers' quarters with regard to parade grounds noticed through field research prompted a search through archival information for an explanation and historical precedent.

The integration of archival and field methods necessitates an integration of visual, written, and oral sources in the final report. This document relies on maps and photographs to not only illustrate findings but also to provide evidence of the characteristics of the historical landscape areas inventories here.

Evaluation

The evaluation of the historic landscape of Fort Myer follows the guidelines for evaluating historic districts and sites for the National Register of Historic Places (NRHP) as described in the *Guidelines*. Fort Myer is already designated a National Historic Landmark and contains a registered NRHP historic district. In a situation such as this, the *Guidelines* call for a re-evaluation of the boundaries of the NRHP historic district based on the new information made available through the holistic landscape approach described above. Recommendations for modifications are provided at the end of this report.

Special Circumstances of Fort Myer

Fort Myer is not a typical military installation. It does not have extensive training grounds, but it does provide quarters for large number of the highest-ranking officers, both commissioned and non-commissioned, in

the services. Its missions today are primarily ceremonial with units of the Third Infantry and the Army Band serving the National Capital Area in a variety of capacities. For security reasons, access to certain historic portions of the installation is restricted. While it is an open post, obtaining the proper permissions for field research is especially important at Fort Myer.

The installation has been the site of a number of very important historical events, but Fort Myer still lacks thorough historical documentation. This makes the collection and processing of archival information a difficult, time-consuming, but important task. Furthermore, this author found the archival material relevant to this study to be sparse. Quartermaster records, Adjutant General's records, and Signal Corps records in the Fort Myer section at the National Archives lacked much of the usual correspondence that explains the decision making process and activities regarding modification of the landscape. It is possible that this information exists, but it may take some time to find its location. A thorough search of the archives was not feasible for the budget and time constraints of this study. There is a need for a comprehensive book to be written on the history of Fort Myer. In contrast, there is a large amount of visual material relating to the history of Fort Myer. This report is the result of extensive archival research of visual materials integrated with as much primary and secondary material as could be found.

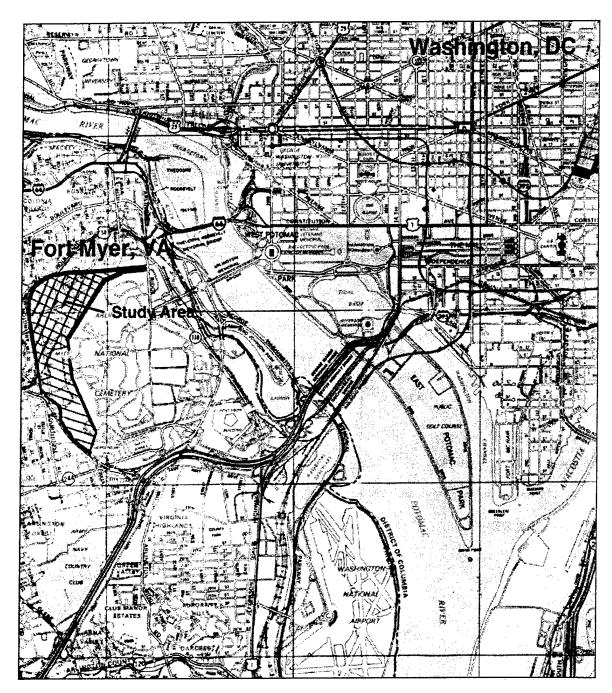


Figure 1. Map showing location of Fort Myer in relation to Washington, DC. Study area is indicated in cross-hatching (based on general roadmap by Color Art, Inc. 1996).

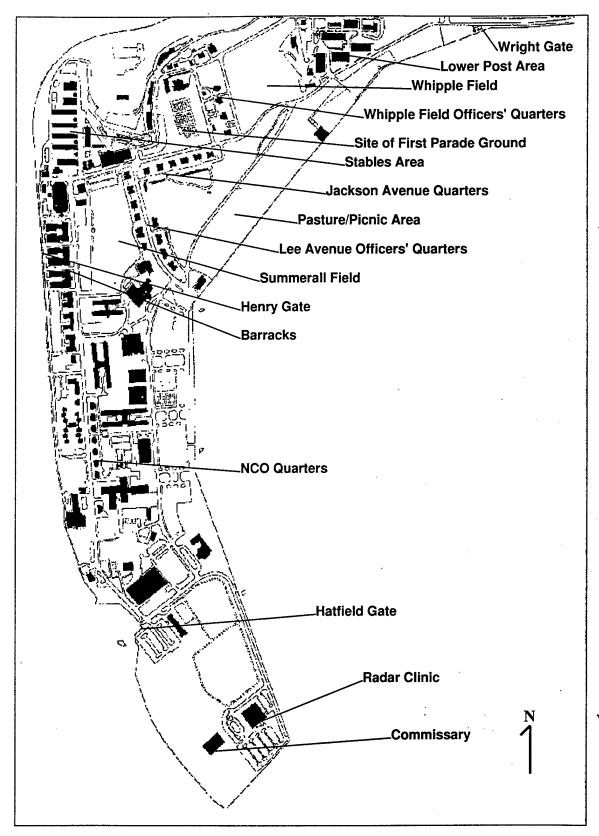


Figure 2. Recent map of Fort Myer (based on general map of Fort Myer c.1985).

Natural History

An understanding of the natural history of a region helps explain the physical character of its landscape. The physical character of the landscape, in turn, informs the understanding of the process of human interaction with the landscape. For example, the geology and topography of the region in which Fort Myer is located helps explain the choice of location of Civil War Forts Cass and Whipple. The soils and climate of the region help explain the vegetation and land use decisions.

Geology and Topography

Fort Myer is situated in northern Virginia. The region is located between two physiographic regions:

1) the Atlantic Coastal Plain, and 2) the Piedmont Plateau. The convergence of these two provinces creates a transition zone with a topographic feature called the "Fall Line." Rivers and streams that traverse this transition zone tend to form waterfalls as they pour off the bedrock of the Piedmont (as at Great Falls on the Potomac river) and flow towards the Coastal Plain and the Atlantic Ocean (Friis 1971).

In northern Virginia, the tributaries of the Potomac River produce low, deeply dissected gorges and valleys in the easily eroded hills. Fort Myer is located atop a hill some 200 feet above the river with a number of small streams originating in, flowing through, and flowing around the installation. One of the larger tributaries, Rocky Run, historically flowed across the northwestern corner of the installation. However, Route 50, widened in the 1960s, rounds off the corner of the post and obscures the stream's original path. A second tributary to the Potomac River, historically called "Wampakin Branch" originates in Fort Myer (in the picnic area) and flows through Arlington Cemetery to the Potomac. A third tributary, a portion of Long Branch, today defines part of the southern boundary of Fort Myer (Mitchell (Map) 1971) (see Figure 3). The topographic relief that results from Rocky Run, Wampakin Branch and a number of smaller unnamed, intermittent streams influenced the choice of location for Civil War Forts Cass and Whipple, predecessors of Fort Myer. The general layout and shape of Fort Myer today can also be largely attributed to these issues of geology and topography.

Soils and Climate

The soils of Arlington County, being below the fall line in the transition area between the Piedmont Plateau and the Coastal Plain, are generally made up of unconsolidated gravels, sand, and clay (McMillen 1960) that are quite susceptible to erosion. Along the riverbanks and stream banks, periodic flooding has developed thicker layers of topsoil. The well-drained soils of Fort Myer are suitable for a wide range of plant species.

Fort Myer is located at the convergence of three "zones of hardiness" as defined by the U.S.

Department of Agriculture (Dirr 1983) (see Figure 4). Zones 7 and 8 converge just south of the Washington,

DC area with Zone 9 along the coast. The proximity of Fort Myer to the Atlantic Ocean provides a slight

moderating effect in temperature. Occasional snowfalls are the norm in the winters, as are extreme temperatures
and humidity for brief periods in the summers. However, adequate rainfall and a long growing season combine
to permit a much wider range of plant species than inland regions at the same latitude.

Vegetation

The vegetation of the Mid-Atlantic region of the United States is generally described as eastern deciduous forest with three basic divisions: 1) Maple-Beech; 2) Oak-Chestnut; and 3) Oak-Hickory. Maple-Beech forests are found in northern sections of the East Coast and not in the study area. In the transition region of Northern Virginia, the Oak-Chestnut climax forest of the Piedmont merges into the Coastal forest composed of Oak-Hickory mixed with pines. Therefore multiple plant associations characterize the native vegetation of the study area of Fort Myer.

Oak-Chestnut is a bit of a misnomer today because the American chestnut (*Castanea americana*) fell victim to a fungus introduced from Asia called chestnut blight that began killing this important eastern forest tree in the early 1900s. By 1950, nearly all of the American chestnut trees were gone (Brasier 1990). According to McMillen's (1960) study on the trees of Arlington Cemetery, the Oak-Chestnut forest typically consists of the following dominant tree species:

- Chestnut Oak (Quercus montana)
- Scarlet Oak (Quercus coccinea)
- Tuliptree (Liriodendron tuplipifera)

Frequent associates include:

- Red Oak (Quercus borealis maxima)
- White Oak (Quercus alba)
- Sweet Gum (Liquidambar styraciflua)
- Shagbark Hickory (Carya ovata)

The Oak-Hickory climax forest includes the following dominant tree species:

- Red Oak (Quercus borealis maxima)
- Black Oak (Quercus velutina)
- White Oak (Quercus alba)
- Bur Oak (Quercus macrocarpa)
- Shagbark Hickory (Carya ovata)
- Mockernut Hickory (Carya tomentosa)

Frequent associates include:

- Scarlet Oak (Quercus coccinea)
- Southern Red Oak (Quercus falcata)
- Pignut (Carya glabra)
- Post Oak (Quercus stellata) direr soils
- Blackjack Oak (Quercus marilandica) drier soils

Other associates of these two climax forests found in areas with more topsoil (i.e. river banks and floodplains) include:

- Red Maple (Acer rubrum)
- Ash (Fraxinus)
- American Elm (*Ulmus americana*)
- Silver Maple (Acer saccarinum)
- Black Walnut (Juglans nigra)

• American Sycamore (Platanus occidentalis)

Understory trees common in the two climax forests described above include:

- Eastern Dogwood (Cornus florida)
- Red Cedar (Juniperus virginiana)

Early successional growth in disturbed areas includes the following plants:

- Virginia Scrub Pine (*Pinus virginiana*)
- Black Locust (Robinia psudoacacia)
- Persimmon (Diospyros virginiana)
- Pawpaw (Asiminia triloba)
- Black Cherry (Prunus serotina)
- False Shagbark Hickory (Carya ovalis)
- Eastern Redbud (Cercis canadensis)
- Wild Azaleas (*Rhododendron sp.*)
- Mountain Laurel (Kalmia latifolia)

One of the earliest recorded eyewitness accounts of the climax forest along the Potomac river is quoted in Friis (1971). Father Andrew White wrote the following description in 1634:

This is the sweetest and greatest river I have seene, so that the Thames is but a little finger to it. There are noe marshes or swampes about it, but solid firme ground, with great variety of woode not choaked up with undershrubs, but commonly so farre distant from each other as a coach and fower horses may travel without molestation.

In general, the character of the vegetation in Arlington County, Virginia is thought to have been dense forests of hardwood trees interspersed with stands of red cedar and Virginia pine. According to Friis (1971),

In some places there were colonies of hemlock. Yellow poplar and other hardwoods grew near the Potomac. On drier sites inland oak and scattered Virginia pine were dominant. Chestnut trees were found on the higher terraces. Except for a very few small protected stands, this luxurious natural vegetation was destroyed by the ax and fire during the initial half century of agricultural settlement. This natural growth has been supplanted by red, white, pin, black, post, blackjack, and chestnut oaks, and hickory, beech, poplar, black locust, maple, dogwood, gum sassafras, and holly. Throughout much of the forest are scattered stands of Virginia pine.

It appears that the land that became the Arlington Estate at the beginning of the nineteenth century qualifies as one of the "small protected stands" (McMillen 1960).

Many of the species listed above can still be found in neighboring Arlington Cemetery and they are a good indication of the kinds of trees and shrubs that grew in the study area prior to the 1860s when the area was largely clear cut as described below in the Civil War section. Fort Myer today has an extensive variety of trees and shrubs, many more than are listed above. A general tree cover inventory of Fort Myer in June of 1991 indicated 82 different species of endemic, naturalized, and introduced species (See Appendix). While many of the trees listed are endemic to the study area, the landscape of the installation has changed dramatically over the past 200 years. With the possible exception of an enormous oak on Whipple Field that may date to the early 1800s, the vegetation of Fort Myer is relatively young, mostly planted in the last 50 years.

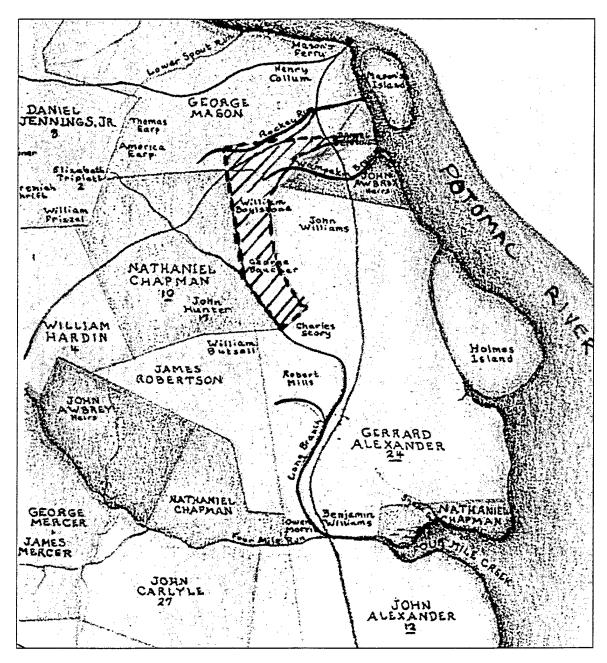


Figure 3. Arlington County (then Fairfax County), Virginia in 1760. Note streams "Rocky Run," "Wampakin Branch," and "Long Branch" in the Fort Myer area, outlined with dashed line and shaded (Mitchell 1987).

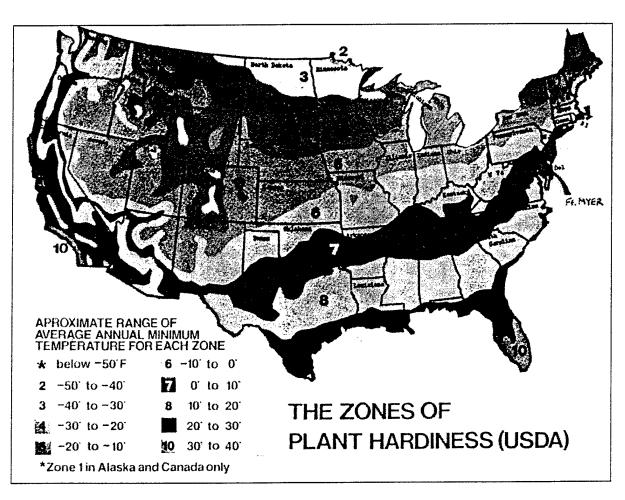


Figure 4. USDA Hardiness Zones 7, 8, and 9 converge near Fort Myer (Dirr 1983).

Historical Overview

The history of the northern Virginia and the Potomac River Valley since European contact dates to 1608 and the voyage of John Smith up the Potomac River. However, for the purposes of this report the history of the this region, as it directly relates to the history of Fort Myer, need only be traced to ownership of the land immediately prior to military occupation in 1861. The Civil War, which began in that year, had a profound impact on the landscape of the region that is now Fort Myer. There is little or no trace of the original Civil War forts today, but the landscape reflects the changes that occurred to vegetation and topography. Furthermore, the location of Fort Myer itself resulted from the location of the Civil War forts. Subsequent use of the post as a Signal Corps School led to the first semi-permanent and permanent construction and established the general layout of the post as it exists today. The next phase of military use involved the transformation of the post into a cavalry show place and home of Army Generals. Extensive building and re-building between 1891 and 1944 resulted in all but one of the 91 historic structures that survive today, the exception being Building #42, the restored 1878 Meigs House. Each of these time periods is filled with fascinating stories of persons and events. However, the following brief discussions of these time periods focus on the relationship between historical circumstances and their effect on the landscape and do not provide comprehensive historical accounts of the persons and events that define Fort Myer's rich history.

The landscape of Fort Myer evolved over the years according to the need of the Army. the spatial organization and pattern of use have clearly developed in close relationship to existing natural features. A set of transparent overlays illustrates the stages of development in Appendix C.

Mt. Washington and the Arlington Estate 1802-1861

Fort Myer occupies some 250 acres of land that was part of a 1,100-acre estate inherited by George Washington Parke Custis. It functioned as a "gentleman's estate" from 1802 until the outbreak of the Civil War in 1861. Information on the history of the estate helps establish the nature of the area that became Fort Myer immediately prior to the establishment of a federal military presence.

Establishment of Arlington Estate

The land that is now occupied by Arlington Cemetery and Fort Myer is part of the 1,100-acre tract purchased by John Parke Custis in 1770. Mr. J. P. Custis, son of Martha Washington from a previous marriage and adopted son of George Washington, died of illness while serving as General Washington's aide during the battle of Yorktown in 1781. The estate, originally named "Mt. Washington," reverted to his son, George Washington Parke Custis, then only six months of age. George and Martha Washington adopted their grandson, G. W. P. Custis, who lived with them at Mount Vernon until their deaths in 1799 and 1802 respectively. By that time, G. W. P. Custis was in his early twenties and he moved from Mt. Vernon to the estate, which had been renamed "Arlington" after a family home on the Eastern Shore of Virginia. By 1803, Mr. Custis began building a home that is today known as the Lee Mansion (Flexnor 1969, McMillen 1960).

The estate ended up in federal hands as a result of the circumstances surrounding outbreak of the Civil War and the succession of Virginia from the Union in 1861. Mr. G. W. P. Custis married and had four children. Only one survived childhood, daughter Mary Anna Randolph Custis. In 1831 she married Lieutenant Robert E. Lee. During the next 30 years, the Lees lived at Arlington, when military duty permitted. Being an officer of the U.S. Army, Robert E. Lee was faced with a difficult decision when his native Virginia succeeded from the Union. He chose to side with the Confederacy and left the Arlington Estate for the last time in 1861. The U.S. Army placed troops on Arlington Heights and used the house as a headquarters. In 1864, the Federal Government purchased the property at a public sale claiming default of payment of property tax. In 1883, an heir to the estate sued the Government successfully and received a settlement in exchange for legal title to the property.

Treatment of the Grounds

Mr. G. W. P. Custis extended a great deal of effort in establishing a managed forest in the front half of the estate with its view of the Potomac River and the growing city of Washington. Mr. Custis' father chose the location of the estate primarily because of its proximity to Georgetown, across the river to the north, and Alexandria to the south. The main road connecting these two important towns ran along the river and directly in front of the Arlington estate. The back part of the estate, the part that eventually became Fort Myer, seems to have been left as a series of large groves and springs with a network of roads leading to the small towns and agricultural homesteads of Northern Virginia (see Figure 5).

¹ A "gentleman's estate" is distinguished from a working estate in that it functions as a home and social setting rather than as a plantation or farm.

Landscape Summary

Even after the establishment of the Arlington estate, the vegetation of the area that became Fort Myer appears to have remained generally the same, an eastern deciduous forest. The topography of the estate provided a high point perfectly suited to give the mansion a view of the river and the city of Washington. Other high points on the back half of the estate led to its occupation by military forces during the Civil War (see Figure 6).

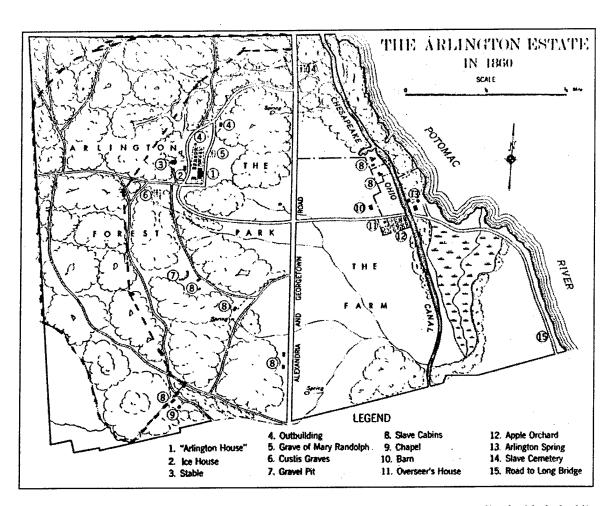


Figure 5. The Arlington Estate in 1860. Note that the forested area is now Fort Myer, outlined with dashed line (Gurney 1965).

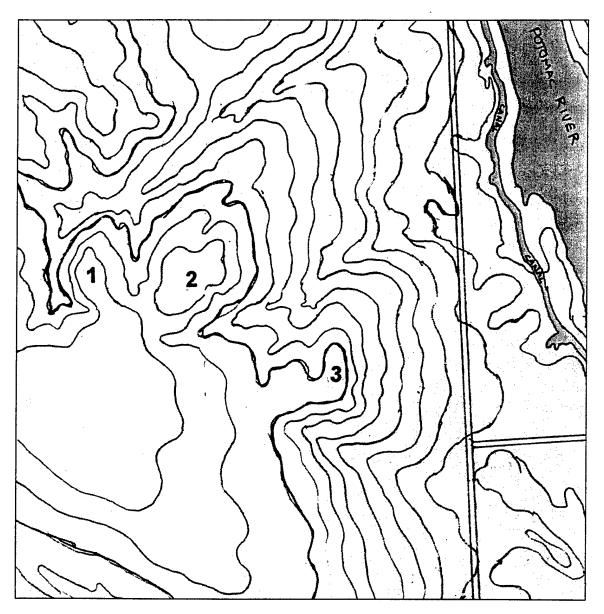


Figure 6. Topography of Arlington Estate. Note the location of 1) Fort Cass; 2) Fort Whipple; and 3) the Lee Mansion (based on Barnard 1871).

Civil War: Forts Cass and Whipple 1861-1865

The circumstances that led to the location of today's Fort Myer date to this time period, as do the first major landscape changes. The Civil War prompted the defensive occupation of the highland surrounding the city of Washington. Forts Cass and Whipple were part of that defensive ring. Today, any remains that exist lie buried beneath the stables area and officers' row areas of Fort Myer respectively. The War also prompted the clear cutting of the wooded areas along Arlington Heights. The deforestation of the area had a major impact on the appearance of the installation in its first decades and until planted trees began to mature. The Civil War determined the general location of the installation, and to a limited degree, roads constructed or maintained during the War ultimately contributed to the boundary and shape of the installation as it stands today.

The Defense of Washington

At the beginning of the Civil War, marked by the firing on Fort Sumter, South Carolina on April 12, 1861, Washington, DC found itself in a vulnerable position on what would become the boarder between the Union North and the Confederate South. Initially, the Federal officials viewed only the southern land approach to the city as needing defensive works (Cooling 1972). Arlington Heights posed particular danger because from that point, artillery fire could reach the White House and many Government buildings. On the night of May 23-24, just hours after the people of Virginia voted for secession, Federal troops crossed the Potomac River to secure the heights of Arlington and the important railway junction in Alexandria, Virginia (Rose 1960). The first forts and entrenchments were intended to defend the bridges and secure Alexandria. Federal troops constructed Fort Corcoran to cover the Aqueduct Bridge that connected Northern Virginia to Georgetown and Fort Runyon to encompass and control an important road junction near Long Bridge. At the same time, troops constructed Fort Ellsworth in Alexandria. Next, because Forts Corcoran and Runyon lay below the high ground of Arlington, the troops constructed Forts Albany, Bennett, and Haggerty and a series of rifle trenches to guard the approaches (see Figure 7). This work took seven weeks (Rose 1960).

The next stage of construction followed the disastrous defeat of Union troops by Confederate forces at the First Battle of Bull Run, a mere 37 miles from Washington. Union generals now viewed the first defensive works around Washington as inadequate and began work on the elaborate circumferential defense system of which both Fort Cass and Fort Whipple were a part. The outer ring of the system consisted of a series of forts and lunettes connected by roads and rifle trenches. A lunette is a fieldwork with two faces, forming a salient angle and two parallel flanks. Fort Cass, first known as Fort Ramsay, was a lunette in the outer ring. Soldiers completed it by the end of 1861. In 1862, Secretary of War Stanton appointed a commission of Union Generals to determine the sufficiency of the system of defenses.

Strengthening the Cordon

In 1862, the commission recommended the construction of auxiliary batteries to cover the ravines and depressions between the forts and lunettes that formed the defenses of Washington. According to Rose (1960),

² In 1909, Fort Ellsworth served as the turn-around point for Wilbur Wright's out and back cross country flight from Fort Myer. Today the site is located behind the George Washington Masonic National Memorial.

the commission specifically recommended the construction of "a work on the spur behind Forts Cass and Tillinghast... to 'see' into the gorges of these works and give important fire upon the high ground in from of the line." To accomplish this, the Army constructed Fort Whipple, named for Maj. Gen. A. W. Whipple who died May 7, 1863 from wounds at Chancellorsville. When completed, Fort Whipple along with Fort C. F. Smith, a variation on a lunette about a mile north of Fort Cass, represented "the most perfect and beautiful specimens of what may be called 'semipermanent' field works" (Rose 1960). Miller (1976) refers to Fort Whipple as "the finest field work ever constructed." According to Cooling (1972) "by the end of 1863, 60 forts, 93 batteries, and 837 guns encircled the city and 25,000 men were in position to man this complex." The defenses continued to grow through the end of the war with the numbers raising to 68 enclosed forts and batteries armed with 807 pieces of artillery and 98 mortars, 93 unarmed batteries for field guns, 20 miles of rifle trenches, and 30 miles of military roads. Virtually all traces of Forts Cass and Whipple are gone. The Army apparently leveled both forts sometime between 1868 and 1871 to provide level ground for the construction of a Signal Corps School. A 1927 aerial photograph, taken to monitor winter flooding on the Potomac River, shows possible signs of the Fort Whipple's earthworks on the east edge of Whipple Field where Marshall Drive is today (see Figure 8).

The Fort Whipple area included a number of out buildings under the jurisdiction of the Quartermaster. According to a June 21, 1865 plan (following the end of the War), these included five officers' quarters, three barracks, and two mess houses (see Figure 9). A note on the plan reads, "buildings at this fort are constructed like those used for similar purposes at forts north of Potomac." However, this author has been unable to confirm the total number and type of buildings at Fort Whipple. A letter from the Quartermaster General's Office to the Secretary of War dated November 6, 1867 requests permission to sell at public auction the following buildings:

- One Barracks Building 100 x 21 with bunks
- One Laundress Quarters 80 x 20 1/2
- One Laundress Quarters 40 x 20 1/2
- One Sergeants Quarters 16 x 12
- One Stable 44 x 24
- One Hospital Kitchen 12 x 15
- One Hospital Stewards Room and Dispensary 58 x 20
- One Officers' Quarters 58 x 20
- One Officers' Quarters 44 x 16
- with I. [?] 16 x 25

Several of these buildings seem to correspond to the buildings depicted in the 1865 plan. For example, the barracks on the plan are approximately 100 feet by 21 feet and the "mess houses" nearly match the dimensions of the "laundress quarters" as described in the letter. Others, however, do not match in any obvious way. Furthermore, photographs reproduced and described in Brooks (1974), show a large hospital and stables area in what would be the lower post today. This author has been unable to make a good correlation among these three sources. The buildings that appear in the photographs do not accurately match the buildings described in the letter or depicted on the plan. More research into the configuration of the Civil War out buildings at Fort Whipple is needed.

Fort McPherson, another Arlington County fort, deserves mention for it was intended to function in tandem with Fort Whipple. Soldiers began building Fort McPherson in 1864, located in what is now a portion of Arlington Cemetery. However, according to Rose (1960), it was not completed before the end of the war.

Miller (1976) cites a 1902 Washington Star newspaper article that mentions plans for the restoration of Fort McPherson to its "warlike appearance." The same 1927 aerial photograph mentioned above reveals that indeed it was in excellent condition through the 1920s. In the late 1940s, however, Arlington Cemetery authorities completely leveled Fort McPherson; it is not visible today.

Fortification and Deforestation

The fortification of Washington resulted in extensive deforestation. Specifications for the construction of the forts surrounding the city called for earthworks supported with lumber or timber. For example, while engineers designed the exterior slope of the parapet to be covered with three four-inch layers of sod (grass side down), the interiors required timber revetment (Rose 1960). The revetment consisted of posts four to six inches in diameter and five-and-one-half feet in length cut from oak, chestnut, or cedar and set vertically side-by-side. Magazines and bomb-proofs also required heavy timber (Rose 1960). Most, if not all, enclosed forts and batteries included abatis, a defense formed of felled trees with sharpened ends facing the enemy. The forests in Arlington County suffered as troops cut firewood, cleared the area around forts, and cleared lines of fire. As Maj. Gen. J. G. Barnard, chief engineer of the defense system, reported in 1871, "the woods which prevailed along many parts of the line were cleared for a mile or two in front of the works, the counterscarps of which were surrounded by abatis."

Lincoln Visit

It is very likely that President Abraham Lincoln visited Fort Whipple during the Civil War. According to Webb (1973), Lincoln inspected the Arlington forts on August 5, 1863. Fort Whipple was among the newest additions to the defenses of Washington at that time having been completed in June 1863. Webb (1973) found personal accounts of Lincoln's inspection of Fort Strong, a lunette some three-quarters of a mile north of Fort Cass, in a regimental history and in the National Archives regimental papers. Accounts of life at Fort Whipple and events possibly involving the President may be available through unit and regimental histories and papers of the 14th Massachusetts Volunteers Heavy Artillery (companies "A," "E," and "F"), the 145th Ohio Volunteer Infantry, the First Pennsylvania Artillery, the 10th New York Heavy Artillery, and others who garrisoned Forts Whipple and Cass between 1863 and 1865. It is certainly an area for further research on the history of Fort Myer.

The Freedmen's Village and the Arlington Tract

The Freedmen's Village represents an important aspect of the history of the Arlington Estate that is related to Fort Myer. At the beginning of the Civil War, fugitive slaves from the area surrounding Washington, DC fled to the city for protection. An Act of Congress in 1861 forbid slave owners from recovering their "property" or "contraband." The following year, Lincoln's Emancipation Proclamation freed all slaves in the District of Columbia. According to Rose (1976),

The large numbers of footloose and impoverished freed slaves and contraband created a problem. What was in effect a concentration camp was established to house them in the District on East Capitol Street, now the site of the Folger Library. A smallpox epidemic forced the removal of the camp to another site, on 12th Street. But even here conditions

were deplorable. In May 1863, the Quartermaster of the Washington Military District recommended their resettlement in the "pure country air" of the Arlington Plantation.

Rose (1976) and James (1967, 1974) explain that the government established the village on what is now the southern most portion of Arlington Cemetery. Initially, the conditions in the village represented a dramatic improvement. James (1967) describes the village as follows,

It consisted of approximately 100 frame houses, each a story and a half high, with a bedroom on the second floor. The houses were neatly whitewashed and divided in the center so that two families could be accommodated. The houses faced each other with a clean street dividing the rows (see Figure 10).

Rose (1976) notes that the village also included workshops for learning the trades of blacksmith, carpenter, and wheelwright. A dormitory hosted those unable to work (see Figure 11). One of the ideas behind the establishment of the Village was to encourage the independence of the residents with the hope that they would eventually find permanent jobs outside the Village and leave. However, limited employment opportunities for African Americans during and after the Civil War and the relative comfort of the Village led to overcrowding. In 1866, more than 1,000 people lived in the Village (Williams 1991). According to Rose (1976), "tuberculosis and dysentery were rife. Contagious diseases took a heavy toll: there was an average of two deaths a day." In an effort to provide relief, the government subdivided a large portion of the Arlington Estate into nine and ten acre lots that could be rented for a small fee. This area outside of the Village became known as "Arlington Tract" (Rose 1976). To a degree this worked and, the village remained for some 30 years. However, beginning in 1885, the federal government essentially took back the land for use as a military reservation (now part of Fort Myer) and the expansion of Arlington National Cemetery.

On the one hand, the location of the Freedmen's Village was far enough south not to have had an impact on the landscape of what is today Fort Myer. The Village's location, as shown on General Barnard's Civil War map and subsequent maps, is in a portion of Arlington Cemetery just north across the cemetery wall from Federal Building #2, also known as the Navy Annex (see Figure 12)⁵. On the other hand, the Arlington Tract may have had a subtle influence on the Fort Myer landscape. Maps from the 1880s (see Figure 16) show a series of 10 acre plots abutting what was then the southern boundary of the fort, a line that today would run as a perpendicular to Arlington Boulevard, east between Buildings 248 and 249 (the 3rd Infantry Museum), and across Summerall Field, through a portion of Building 400 (the band building) to the Old Chapel. The boundaries of these tracts formed a grid that appears to have influenced the pattern of development of Fort Myer following its acquisition of the land. Maps of the post prior to the acquisition of the tracts to the south indicate that the planners of the post expansion had not yet committed themselves to following the rectangular grid they

³ According to Williams (1991) the government buried the deceased in what is today Section 27 of Arlington National Cemetery with headstones noting names and designated "Civilian" or "Citizen." Stones marked "USCT" in the Section 27 mark the resting places of "U.S. Colored Troops" from the Civil War.

⁴ An unfortunate and ugly controversy surrounded the decision and process of reclaiming the land, and it was accomplished through a series of false accusations and evictions that in some cases carried strong racial overtones. See James (1967, 1974) for a detailed account.

⁵ It should be noted that Williams (1991) states that the Village "sprawled north from what are now the amphitheater and the Tomb of the Unknowns to Section 27." All historical evidence I have found suggests that this information is erroneous. It is true that Section 27 is at the north end of Arlington Cemetery, but the Village itself was certainly much further south.

eventually did. The largest influence of the presence of the Freedmen's Village and the Arlington Tract on Fort Myer's history probably came in the relationship between the people of each. According to James (1974), "villagers cultivated Fort Myer's garden and performed....much of the labor around the fort" in order to pay rent on the land.

Influence of the Civil War on the Landscape of Fort Myer

The main influences of the Civil War period on the landscape of Fort Myer can be summarized as follows:

- Establishment of a military presence: The Civil War brought the military to Arlington Heights in defense of the Federal Capitol. Of the 22 fortifications in Northern Virginia, described in their time as forts "south of the Potomac," only Forts Cass and Whipple became part of a permanent installation.
- The Location and Orientation of Fort Myer: The topography of the Arlington Estate determined the location of Forts Cass and Whipple, and their location in turn determined the location of Fort Myer. With Virginia as hostile territory, the Civil War forts faced west with their backs to Washington. With reunification following the War, the first permanent construction along Grant Avenue and the buildings that replaced them, now the Whipple Field Officers' Quarters, faced towards Washington to take advantage of the view of the city that Forts Cass and Whipple sought to protect from Confederate guns.
- Development Grid: The ten-acre plots that comprised a portion of the Arlington Tract influenced the orientation of the subsequent development and expansion of Fort Myer to the south.
- General Deforestation: The wholesale deforestation of much of the land around the Civil War forts and their lines of fire left the landscape that became Fort Myer nearly barren. Photographs taken during the War and in the early 1870s show a once forested landscape largely denuded. As Fort Whipple developed into a permanent installation, and underwent development as Fort Myer in subsequent years, the Army began planting trees and vegetation in a manner reflective of urban settings of the time. The War had essentially provided a "clean slate."

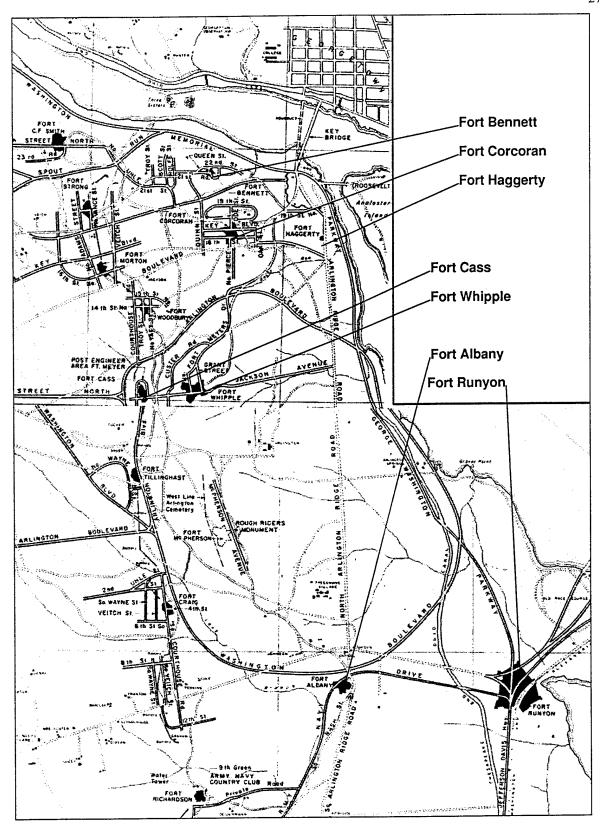


Figure 7. Location of Civil War forts in Arlington, Virginia. The first forts included Corcoran, Runyon, Albany, Bennett, and Haggerty (Miller 1976).



Figure 8. Aerial photograph, 1927, showing possible signs of Fort Whipple earth works. Also note long shadow of the tall Balloon House to the middle right of the image (National Archives and Records Administration, Cartographic and Architectural Branch, RG 328, DC Box 108-214).

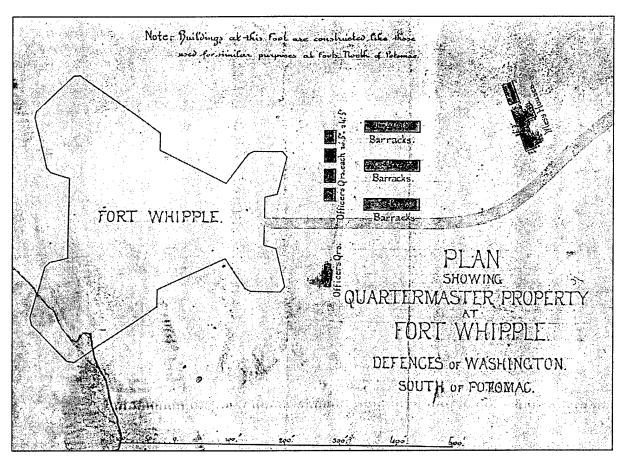


Figure 9. Plan of Fort Whipple, 1865 (National Archives and Records Administration, Cartographic and Architectural Branch, Miscellaneous Fortifications File).

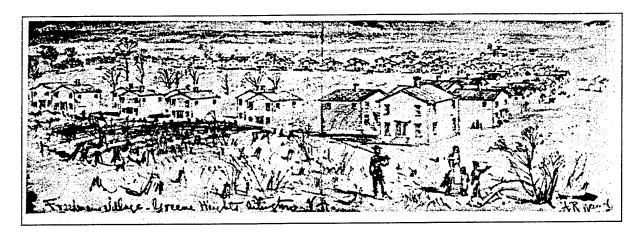


Figure 10. Drawing of Freedmen's Village (reproduced in Gurney 1965).



Figure 11. Probably Freedmen's Village (Library of Congress, Prints and Photographs Division, Civil War File, Alexandria and Arlington Section).

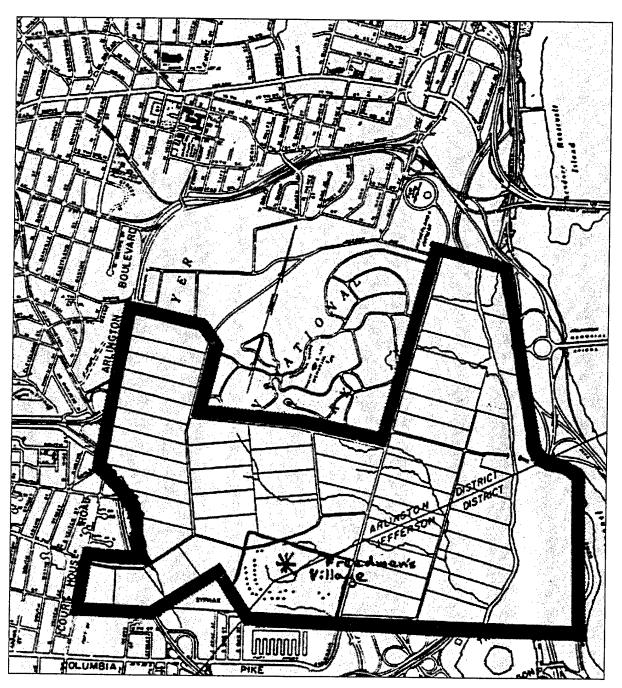


Figure 12. Location of Arlington Tract and Freedmen's Village on recent map of Arlington County (Rose 1976).

Signal Corps School 1869-1887

After the Civil War, Fort Cass and Fort Whipple remained federal property since they lay within the boundaries of the Arlington Estate. In 1872, the government decided to make Fort Whipple a permanent installation. The Army constructed the first cantonment and established the general layout of the historic post area as it stands today.

Transition from War to Peace

The transition of Fort Whipple from a Civil War Fort to a peacetime military installation is not well documented. In fact, the entire period of time the Fort served as a Signal Corps School (1869-1887) is not well documented. In the research process, this lack of documentation placed increased importance on the use of maps and photographs to reconstruct land-use decisions and trends. What is known is that the Army occupied Fort Whipple with various companies of artillery until 1867. In that year, the garrison changed to Company "I", 12th U.S. Infantry under Captain August G. Tassin. In 1868 Captain Tassin and Company "I" left Fort Whipple for Fort Russell. During the next two years, it appears that the Army allowed the earthworks of both Fort Cass and Fort Whipple to deteriorate. There is no record of the garrison or command at Fort Whipple until 1870 when it is noted that the Signal Corps had occupied the Fort since March 1869 (Whitehouse 1941).

The Signal Corps and the First "Permanent" Construction

The story of the Signal Corps and its founder, Gen. A. J. Myer, is a fascinating one. It is told with thoroughness and clarity in M. Marshall (1965). For the purposes of this report, only those details necessary to provide context and understanding to the development of Fort Whipple will be addressed.

In 1866, under the direction of President Andrew Johnson, Secretary of War Stanton appointed Myer to the position of Chief Signal Officer with a brevet commission of "General." This came at the end of a long running dispute between Stanton and Myer dating back to 1863 when Stanton stripped Myer of his Civil War commission. During the Civil War, both Confederate and Union forces put the signaling techniques, developed by Myer before the War, to strategic and tactical advantage and firmly established the importance of signaling to the military. Once he was officially back in charge of signaling activity after the war, Myer developed the Signal Corps to experiment with and to perfect new communications technology for military use.

In the summer of 1868, General Myer established a Signal Training School for a group of officers from the Corps of Engineers. As recounted in D. Marshall (1965), he held class in his Washington, DC office under the following conditions:

He furnished the room with eight tables and chairs, he equipped every table with instruments, battery, and switchboard, and by using great coils of wire to give the effect of distance, he interconnected all the tables in a complex system of eight Morse telegraph

⁶ The main gate for Fort Whipple (and later Fort Myer) from the 1870s to the 1940s stood at the base of Washington Avenue at the intersection of Sherman Road and Fenton Circle. The Army named it "Tassin Gate," presumably in honor of Captain August G. Tassin, commander of Fort Whipple prior to its conversion to a Signal Corps School.

stations. That was the first classroom in which the Signal corps gave formal training in wire telegraphy.

Myer soon found the confines of his office suite unsuitable for holding class, and he transferred the school to Fort Greble after a few weeks. Fort Greble, as part of the defensive cordon, was located four miles south of the Mall of the City of Washington (but still within the District of Columbia). It was across the river from and just north of Alexandria, Virginia, and just east of what today is Bolling Air Force Base. At Fort Greble, the school included training for enlisted men. In January 1869, General Myer transferred the school briefly to Lincoln Barracks and then on to Fort Whipple where it remained for the next 17 years (D. Marshall 1965, Scheips 1974).

General Myer selected Fort Whipple for the school because if offered several important advantages over other locations near the Signal Corps office in Washington, DC. Whipple was a much bigger than Greble, providing an opportunity for, as Myer put it, "drills of telegraphic trains and for experiments with electric lines erected and left standing" (Scheips 1974). The telegraphic trains included horse drawn wagons equipped with field telegraph units and wire. The "electric lines" included an experimental field wire-pole line wrapped with forty miles of wire (D. Marshall 1965). The location on Arlington Heights also offered an important advantage for the Signal Corps School. As Myer stated in his 1869 annual report, the post "is well located for the purpose for which it is occupied, on the heights overlooking the valley of the Potomac, whence ranges for near and distant practice may be had from five to thirty miles" (Scheips 1974). The ranges refer to visual signaling of messages with flags (daylight) and lanterns (night) according to the "wigwag" system developed by Myer. Furthermore, the proximity to Washington, DC enabled General Myer to establish direct links to the Signal Corps office across the river. According to D. Marshall (1965), this line was 10 miles long and strung with four different types of wire to evaluate durability and conductivity in comparison to cost.

General Myer was a man of vision, not only in assessing future possibilities of the Signal Corps, but also with respect to the possibilities of the Fort Whipple as a site for the School. By all accounts, the condition of Fort Whipple at the time of the Signal Corps' arrival was poor. A report by the Surgeon General's Office in 1870 noted that the post consisted of two single story frame Officers' quarters, a guardhouse, a frame hospital with a small kitchen, dispensary, and office (U.S. Army 1870). The hospital referenced may be the one shown in the photographs published by Brooks (1974). The post lacked a storeroom and a messroom. There were no bathing facilities or privies, prompting the Surgeon General's Office to rate the sanitary conditions "decidedly bad" (Scheips 1974). On the positive side, the report noted that the post had excellent drainage and "pure, cool water" from a spring. It is unclear where these first buildings stood. Some may have been in the area now known as the "lower post" or perhaps on the area now known as Whipple Field. It does seem that between 1869 and 1871, the Army leveled the earthworks of Fort Whipple in anticipation of new construction.

During the next ten years, the Signal Corps made a series of improvements to the post and established a general layout that is still clear today. Soon after arriving, the Corps built new wooden barracks with a two story central section and single story wings with a total length of 250 feet, but it suffered from poor ventilation (U.S. Army 1870). In 1872, the Army declared Fort Whipple a permanent military post (Federal Writers' Project 1937). In 1875, the Surgeon General's Office reported a number of improvements that resulted in the establishment of a parade ground with buildings on four sides. These included an improved and ventilated barracks for 200 men (possibly a renovation of the 1870 barracks); a twelve-room instructional building that

also housed the post headquarters (later referred to as the "observatory") (see Figure 18); a guardhouse; a twelve bed regulation hospital (built in 1871); a "double set" officers' quarters (probably duplexes); two buildings for married soldiers; and a kitchen and mess hall (U.S. Army 1875). Maps and building plans from the 1870s also indicate an ordnance shed (1878); a brick magazine (1878); a "sink" (1877), a stable and its addition (1878); laundresses quarters (1873); and a commissary sergeant's quarters (1873). Many if not all, of the buildings from the 1870s appear to be modified versions of standardized plans from the office of the Quartermaster General (Quartermaster 1903).

A series of photographs taken in 1876 show the results of this early development. Roads were of graded dirt, boards served as sidewalks with young trees planted in the yards of the Officers' quarters and along the roads. Visitors to the post from Washington, DC arrived along a road that follows today's Washington Avenue, turned to the left and crossed a bridge with wooden railings of a rustic design spanning a gully that is now an area of fill between Quarters 1 and Quarters 5 (see Figure 14). The road continued along what is today Grant Avenue. The original four officers' quarters faced the view of Washington with their backs to the parade ground, contrasting with the more common orientation of facing the parade ground (see Figure 13). The road turned right onto what is now Jackson Avenue and proceeded past the instruction and headquarters building on the left, along the south edge of the parade ground, past the guardhouse on the left and barracks on the right, and towards the stables.

Generally, the landscape depicted in these photographs from 1876 is dry and barren. However, a close look at the photographs reveals the beginnings of a Victorian landscape aesthetic. Typical Victorian suburban housing plans show groupings of shrubbery at walk entrances, large trees in side yards and only low flower groupings in front yards. Urns often decorated the lawns. Evidence of this type of planting is found in the 1876 photographs (see Figure 13, and Figure 14). Over the following ten years, as the landscape plantings matured, the yards of the officers' quarters even more fully represented the Victorian aesthetic (see Figure 15).

During the 1870s, the Signal Corps engaged in a number of activities and developed a number of important technologies at Fort Whipple. According to D. Marshall (1965), Gen. Myer, in his effort to involve the Signal Corps in weather forecasting, was "grasping for something that would keep the Signal Corps alive" in the midst of post-war budget cuts. In 1870, a joint resolution of Congress charged the Signal Corps with establishing the country's first weather bureau. By the end of the year, reports from Signal Corps sergeants in twenty-four different cities across the country were being filed at the Signal Corps Office. By 1878, Myer received by telegraph "eight reports a day from each of 224 weather stations" across the country including the Aleutian Islands (D. Marshall 1965). This additional mission expanded the curriculum at the Signal Corps School the size of the garrison. Between 1870 and 1874 the garrison at Fort Whipple grew from 74 to 148 (U.S. Army 1875).

In addition to the continued development of telegraphy, the Signal Corps experimented with telephone technology and the heliograph. According to Scheips (1974), the Corps installed the first Army telephone and established a line between Fort Whipple and Myer's Signal Corps Office in Washington, DC in October 1877, "just 18 months after Alexander Graham Bell had taken out his first patent." By 1878, the Corps installed a 45-mile experimental line at Fort Whipple (Scheips 1974). The heliograph, a signaling device that uses mirrors to direct and flash sunlight and developed in the Anglo-Indian army, came to Whipple in the 1870s. The Signal

Corps developed the technology for use in the Southwest, where the Army used it up to World War I (Scheips 1974).

In 1880, the Signal Corps suffered a loss with the death of General Myer. The following year, the War Department renamed Fort Whipple in honor of General Myer. During the following years, the Signal Corps School continued training recruits. According to Scheips (1974) "to be fully qualified as observer-sergeants, enlisted men had to combine preliminary work at Fort Whipple with a 'year of duty and study as assistants' at a weather station and then take additional instruction in 'higher branches' of meteorology [back] at Fort Whipple." Without the energetic lobbying of General Myer and with increasing budget pressures, congressional and War Department support for the Signal Corps began to fade by the end of the 1880s. In 1886, movements were afoot to change Fort Myer into a cavalry post.

Influence of the Signal Corps School Period on the Landscape of Fort Myer

The main influences of the Signal Corps School on the landscape of Fort Myer can be summarized as follows:

- General Post Layout/Spatial Organization: the construction of the Signal Corps School established the general layout of and relationship among the Grant Avenue Quarters, Whipple Field, and the first parade ground. The brick officers' quarters built along Grant Avenue at the turn of the century to replace the frame quarters replicated the original plan in both location and orientation. Whipple Field and its flagpole, established and left clear as a training area for the Signal Corps, remains clear today. The first, main parade ground established in the 1870s with construction on four sides, remained an open space until very recent times when the Army built a set of tennis courts.
- Circulation Patterns: The original entrance road and basic road system of the post are very much in evidence today. The entrance road is now Washington Avenue. Grant Avenue, Jackson Avenue, Custer Road, and Johnson Lane all date from the Signal Corps School period.
- Victorian Architecture and Landscape Architecture Aesthetic: The original housing construction at Fort Whipple reflected Victorian architectural aesthetics in the ornamentation of buildings like the Commanding Officers' Quarters (see Figure 13) and the rustic bridge (see Figure 14). The plantings and design of the grounds around the officers' quarters reflected Victorian landscape architecture aesthetics. The Army planted shade trees in the yards and along the streets. The yards had grass lawns, shrubs, and in some cases, ornamental garden urns that accentuated the approaches to the quarters (see Figure 15).
- Building #42: The only building surviving from the 1870s and 1880s is building #42, built in 1878. In 1886, an Adjutant General's Office (AGO) inventory listed the building as occupied by the commissary sergeant. It has been completely reconditioned to approximate its original condition and can be seen today by guided tour through the History Office of Fort Myer.

Summary of Landscape Areas

Only two landscape areas identifiable today stem from the Signal Corps School period:

- Site of Grant Avenue Quarters and Whipple Field: site of first officers' quarters; view to Washington, DC important for signal practice; site of entrance to Civil War Fort Whipple (1863).
- First Parade Ground/Officers' Recreation Area: parade ground of the Signal Corps; area now occupied by tennis courts



Figure 13. Commanding Officer's Quarters, 1876 (National Archives and Records Administration, Still Picture Branch, RG-111-SC, Virginia-General, Drawer 45).

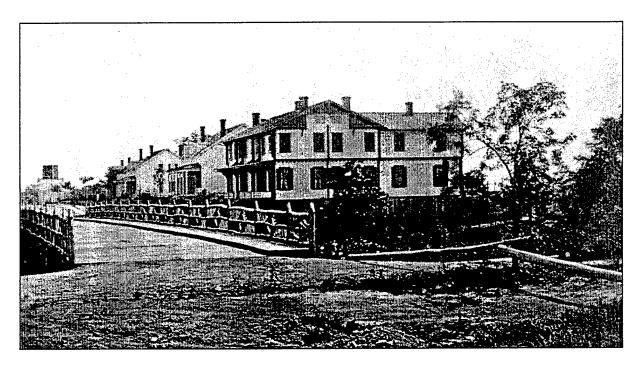


Figure 14. Rustic Bridge, Grant Avenue, 1876 (National Archives and Records Administration, Still Picture Branch, RG-111-SC, Virginia-General, Drawer 45).

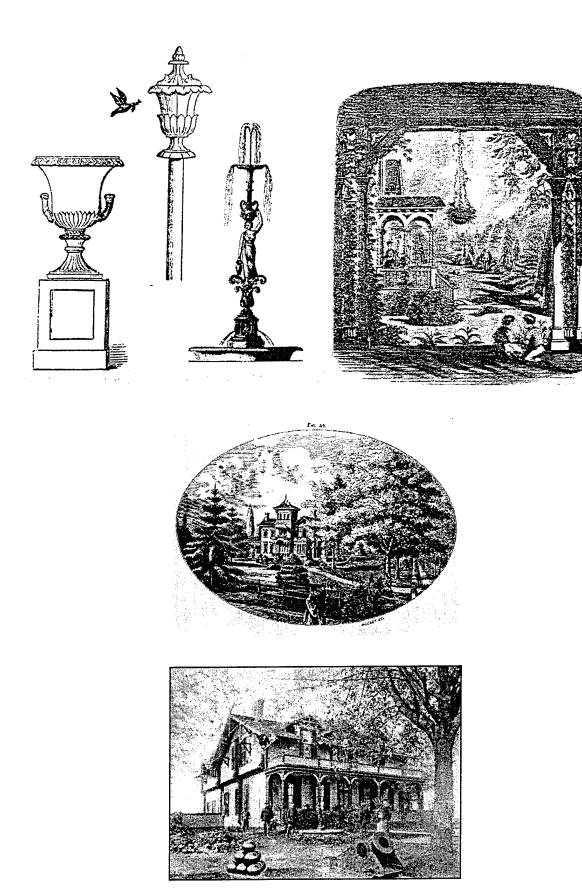


Figure 15. Victorian landscape aesthetics influenced the landscape design at Fort Myer. Top and middle images are period illustrations showing popular styles from the 1870s (Scott 1870). Bottom image, Commanding Officer's Quarters at Fort Myer, c. 1900, shows the use of similar Victorian design concepts (Library of Congress, Prints and Photographs Division).

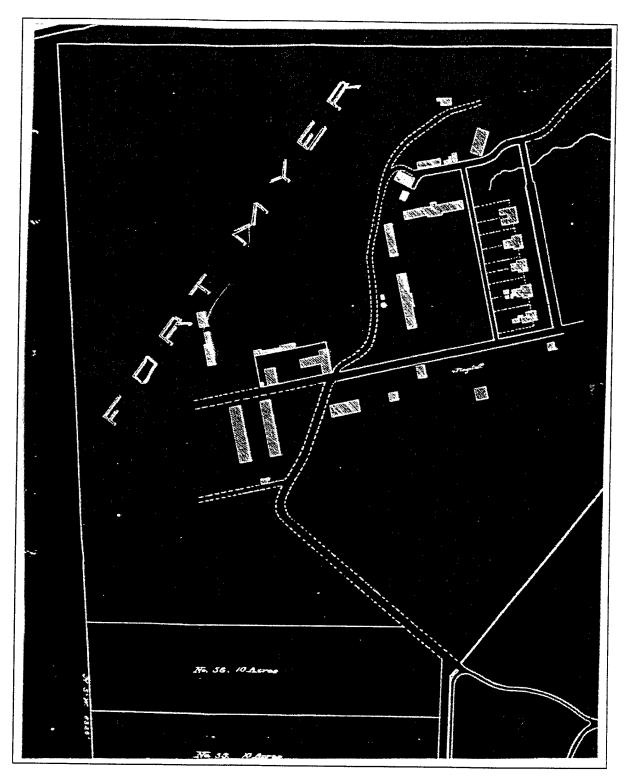


Figure 16. Map of Fort Myer, 1888, showing row of five officers' quarters and two of the ten-acre plots of the Arlington Tract (Library of Congress, Map and Geography Reading Room).

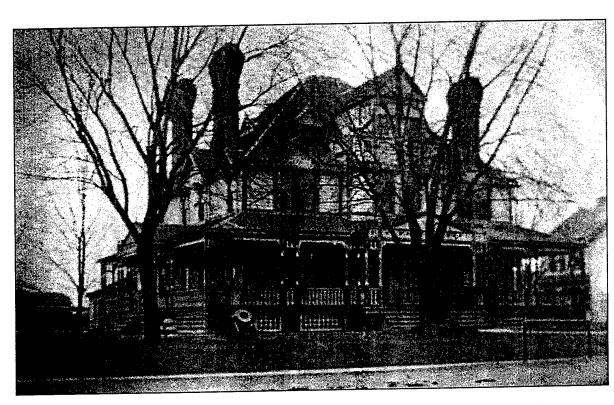


Figure 17. Frame officers' quarters on Grant Avenue, c. 1887-1900 (Library of Congress, Prints and Photographs Division, Lot 11212, LC USZ62-48668).

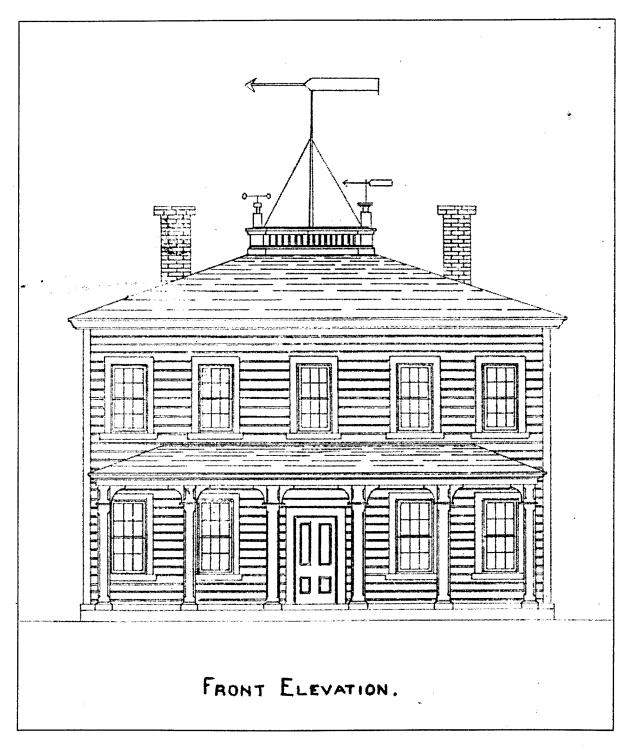


Figure 18. Plan of Signal Corps Observatory and Instructional Building, 1873 (National Archives and Records Administration, Cartographic and Architectural Branch, RG 77, Miscellaneous Fortifications File).

Cavalry Show Place 1887-1942

An Act of Congress on August 4, 1886 called for the re-establishment of Fort Myer as a military station and called for the Signal Corps School to vacate the Fort, which it did on August 7, 1886. Two days later, Lt. Gen. Philip H. Sheridan of the Headquarters, Army of the United States formally requested the establishment of Fort Myer as a cavalry post in the following letter:

To the

Secretary of War,

Sir:

In consequence of a provision in the Sundry Civil Bill, Fort Myer, Virginia, reverts to the line of the Army as a military station, and believing it to be to the best interest of the service that there should be a detachment of cavalry in the vicinity of the Capital, I have the honor to request that I may be authorized to station at Fort Myer, Virginia, two troops of Cavalry, with Major James Biddle, Sixth U.S. Cavalry in Command.

Very Respectfully,
Your obedient servant,
[P.H. Sheridan]
Lieutenant General, Commanding

Nearly a year later, by authority of AGO General Order No. 42, dated 6 July 1887, Fort Myer became a cavalry post. On 15 July 1887, Troop "B" of the Sixth Cavalry arrived from Fort Lewis, Colorado followed on 21 July by Troop "B" of the Fourth Cavalry from Fort Hauchuca, Arizona. This change in mission required new buildings such as new stables, new troop barracks, and eventually a riding hall. A contemporary newspaper article in the Washington Star noted that,

The necessary changes and improvements in the buildings of Fort Myer have not been made yet, but it is expected that work will commence shortly. No inconvenience will result, however, as the cavalry troops can be comfortable in tents until cold weather.

Over the next three decades, Fort Myer transformed from a cantonment of aging frame structures into a cantonment of elegant brick buildings, many of which still stand today.

Fort Myer at the Time of Transition (1886-1890)

In April of 1886, the Adjutant General's Office conducted an inventory of Fort Myer improvements and resources. It found 33 buildings and 152 acres under various uses. The report noted the following:

•	Fort Myer [cantonment]	38 acres
•	Orchard [apples, peaches, pears, cherries, and grapes]	10 acres
•	One pasture field with barb wire fence w/ 10 acre garden	50 acres
•	One pasture field with barb wire fence	44 acres

The report goes on to note that "there is also a small greenhouse at the post which produces flowers, plants, and shrubbery [to] beautify the post."

The inventory of 33 buildings included the newly begun construction of Building No. 3, which stood between today's Quarters 6 and 7. Photographs show it as a very large ornate Victorian frame building that possibly served as a post headquarters (see Figure 17). With the exception of this building, most of the

buildings standing in 1887 dated from the 1870s. By 1900, brick structures replaced nearly all of the frame buildings.

There are several sources of information that provide a sense of the landscape of Fort Myer at the time of transition. A newspaper account from 12 July 1888 describes the Fort in the following way (Evening Star 1888):

It would be impossible to imagine a more delightful home than on this high plateau commanding on every side views that are magnificent in their scope. The "Fort" is practically no fort at all but merely a collection of buildings enclosed by a fence, barbed wire maybe, with gates at intervals that are hospitably open.

It goes on to describe the entrance to Fort Myer as follows:

A rustic bridge leads the visitor to the eastern limit of the plain where the pretty quarters of the officers stand. They are shaded by handsome trees, and surrounded by neat lawns and flower beds. From here a striking view of the city is obtained....

The article also describes a number of the buildings including the "executive building," formerly the Signal Corps School "Observatory" or instruction building, and the view from its front porch. It notes that,

The flagstaff is in the near foreground; then back of it stretches a marvelous piece of turf of nearly two acres. It is almost level and as smooth as a floor. To the left stands the 6th Cavalry barracks -- the old Signal Service barracks -- and the mess-halls; in the background are the 4th Cavalry's quarters, a new building of a tasty design, and on the right the rest of the officers' quarters.

The area described is today the tennis court complex behind the Whipple Field Officers' Quarters as it was seen from the south end across Jackson Ave. The executive building stood behind and centered between Quarters 11 and 12 as they stand today (see Figure 20).

Even after Fort Myer became a cavalry post, enlisted men learned the signal service code as part of their training. As the Washington Evening Star (1888) relates, the training at Fort Myer involved the view from Whipple Field.

The signal drill is given to every man, and consists in practice in the signal service code with the flag. A man is sent across the river to the base of the [Washington] monument and there spells out by means of his flag messages to another on the bluff at the fort.

The view of Washington, DC from Whipple Field continued to influence the design and use of Fort Myer for years to come.

Another source of information about the condition of Fort Myer is an 1889 AGO inspection report (AGO 1889). The report comments extensively on the cavalry troops, their mounts, and weapons, but it also notes the general condition of the post. It states that "the post is in excellent sanitary condition and in good police and repair." It notes that "the supply of water is not quite so great as desired" and that "the great want of the post seems to be more troops and a riding hall." It explains that "the squadron is too small a garrison to keep up with all the routine duties of a military post, and still attain the highest perfection in military instruction and drill." Concerning the riding hall, the report states that "the peculiar soil of this section renders it almost impossible to accomplish any thing mounted in the open air during the winter and early spring." Within a few months of the

inspection, many of the suggestions, including the riding hall, had received endorsements from the Army Headquarters and the War Department. Within a few years, Fort Myer experienced tremendous improvements.

The article form the Washington Evening Star (1888) indicates the cavalry troops stationed at Fort Myer represented troops that had experienced combat against the Indians of the Western frontier. It states that,

Fort Myer is now the garrison home of a couple of cavalry troops that have seen bitter fighting on the frontier, and have been placed in this, one of the pleasantest posts in the country, as a sort of reward for their hard knocks in their country's service.

Subsequent cavalry troops included a unit of Buffalo Soldiers, Troop "K" of the 9th Cavalry, from 1891 to 1894. Not only did Fort Myer constitute the only cavalry post east of the Mississippi River, the stationing of Troop "K" established the first post-Civil War troop of "colored" soldiers stationed east of the Mississippi River and near a large center of population (Myer n.d.).

Rebuilding and Expanding (1891-1898)

The 1890s saw many changes at Fort Myer. Today, buildings built between 1890 and 1900, account for 33 of the remaining 91 buildings in the current historic district and its proposed expansion. Many of the new buildings replaced earlier frame buildings with brick. This included four new stables, two in 1891 and two in 1896, NCO Quarters 45 and 45 in 1893, and Wainwright Hall in 1896. Other new building established new elements to the post layout that set a pattern for future development. For example, the new officers' quarters on Jackson Avenue (buildings 11 and 12), the officers' quarters on Lee Avenue (buildings 23-26), and the barracks on Sheridan Avenue (buildings 246 and 247), all set a precedent for future development. Other important buildings built during this time include the first Riding Hall (c.1893), a new hospital in 1896 (building 59), a headquarters building (Patton Hall), and a new guardhouse.

The Washington Evening Star (1894) noted the unusual layout of Fort Myer in the following way:

The post is so situated that no photographic bird's eye view of its entirety can well be taken. Owing to its gradual enlargement and diversion from original purposes, it is not laid out according to those orthodox plans which govern at most army posts, and there is no level view of the whole post. For example, the original line of officers' quarters adjoining the commander's house faces toward the city, extending along the ridge, which makes a rapid decline of 150 feet into a sandy hollow, while other officers' quarters of more recent construction flank the headquarters building at right angle to the main approach, and face the post parade, which at Fort Myer is in rear of the commander's house.

The spatial organization and pattern of use at Fort Myer developed in close relationship to existing natural features.

Other important changes during the 1890s include the building of a spur of the Washington Arlington & Falls Church Railway (1894) that included a station and the expansion of the southern boarder of the post. The rail line entered the post near today's Wright Gate, skirted the Arlington Cemetery wall following a path that today is essentially McNair Road, and arrived at the top of the hill at the station (see Figure 19). The station stood at what is now the intersection of McNair Road and Lee Avenue. The area of Fort Myer nearly doubled when, in 1895, the Army expanded the southern boundary of the Fort to include an additional 108 acres of the military reserve.

Photographs of Fort Myer during this period show evidence of Victorian landscaping around the Officers' quarters, open parade grounds, street improvements, and the general urban feeling of the Fort (see Figure 21). The removal of the Rustic Bridge in 1896 and the filling of the ravine it spanned foreshadowed major changes to the Whipple Field Officers' Quarters.

Rebuilding and Expanding on the Upper Post (1899-1915)

Another 31 of the remaining 91 historic buildings date from between 1899 and 1915. The Whipple Field Officers' Quarters experienced a complete rebuilding effort. Over the course of six years, four new brick quarters replaced the five frame buildings on Grant Avenue. Quarters 5 and 8 date to 1903. Quarters 6 dates to 1908 and Quarters 7 dates to 1909. The other new buildings constituted a continuation and expansion of the development pattern established in the previous time period. Quarters 13-16 on Jackson Avenue and Quarters 27 on Lee Avenue followed the pattern set down earlier by Quarters 11 and 12 on Jackson and Quarters 23-26 on Lee. Likewise, barracks 248, 249, and 250 followed the pattern established by buildings 246 and 247. The same is true for stables 224 and 227.

The orientation of the Whipple Field Officers' Quarters followed the precedent set by the original officers' quarters, facing the view of the city rather than the parade field behind them. In contrast, the Jackson Avenue Quarters does face the parade field in the more traditional manner. The most unusual break from traditional military post design is the orientation of the Lee Avenue Quarters. Rather than facing Summerall Field like the barracks, these officer quarters face the street. Unlike the Whipple Field Officers' Quarters, there is no dramatic city view to be had from these quarters, and the impetus for facing the street appears to have been the production of an urban setting. The urban nature of the post, with its street trees and sidewalks and its proximity to a large urban center influenced the layout of the post more than the military traditions of facing parade grounds.

The new construction during this period reflects late Victorian architecture and landscape architecture (see Figure 15). Consistent with trends in Victorian architecture, buildings are less ornate than their frame predecessors. Historic photographs show that landscape treatments included an increase in foundation plantings. The yards had grass lawns, shrubs, large shade trees in lawns, and in some cases, ornamental garden urns that accentuated the approaches to the quarters.

The Lower Post and the Return of the Signal Corps (1899-1910)

While changes were occurring in the main upper post area, the Army began to develop a separate cantonment for the Signal Corps. The area at the foot of the hill that is the site of Fort Whipple became known as the "Lower Post." By authority of General Order #193 of the Adjutant General's Office, construction began in 1899 and included a number of buildings. A list of Signal Corps buildings from 1900 provides the following information (National Archives 1900)

- 1 Barrack [now Building 305]
- 1 Double Officers' Quarters [now Quarters 2]
- 1 Commanding Officer's Quarters [now Quarters 1]
- 1 Storehouse [now Building 308]
- Temporary Signal Storehouse
- Wagon Shed
- Temporary Stable for 12 horses

- Balloon House
- Administration and Instruction building [now Building 317]

This list, along with maps from 1906 and 1911, shows that the buildings today known as Quarters 1 and Quarters 2 were originally part of the new Signal Corps cantonment of the lower post (see Figure 22). The Signal Corps Post had its own boundary that separated it (in an administrative sense) from the rest of Fort Myer. Today, nine of the original Signal Corps buildings survive: Quarters 1 and 2 on the upper post and buildings 305, 306, 307, 308, 316, 317, and 321. Buildings 309, 312, 313, 318, and 322 date from 1919 through the 1940s. Building 305 served as the barracks for the famous African American unit, the Machine Gun Troop of the 10th Cavalry, from October 1931 to the 1940s (see Figure 27). This troop reportedly used buildings 306 and 307 for its stables (Myer c.1993-1994), but maps and records suggest that 306 and 312 would more likely have served as a stables. Their duties included caring for the horses of President Franklin D. Roosevelt and First Lady Eleanor Roosevelt, who rode at Fort Myer almost daily (Myer c.1993-1994).

The development of the lower post area had a lasting impact on the organization and orientation of Fort Myer. The main entrance to the post was through the Tassin Gate at the base of Washington Avenue. The Signal Corps Post established a cull-de-sac of sorts with the barrack building (305) facing the view of Washington. According to photographs from about 1900, the Washington Monument could be seen from what is today Fenton Circle. Today trees obscure the view. It appears that sometime after 1911, the Signal Corps again left Fort Myer and the lower post area became part of the main post.

In more recent years, the closure of Washington Avenue and the Tassin Gate and the opening of the Wright Gate below the lower post, drastically changed traffic patterns. Today, entering Fort Myer from the east brings visitors through what used to be the back of the lower post before reaching the upper post. McNair Road serves as a by-pass to the upper post that brings traffic up the historic path followed by electric trains from the 1890s through the 1920s.

Aviation at Fort Myer

Since the Civil War, the mission of the Signal Corps included the use of observation balloons in combat, including the Spanish-American War (1898), and it is not surprising to find a "Balloon House" on the Lower Post of Fort Myer. The Army organized a balloon detachment at Fort Myer in May 1902, but it was the purchase of a new balloon in 1907, Signal Corps Balloon No. 9, that led to increased activity (Tierney 1965). The building was unusual for its height. Several photographs from the National Archives indicate its function with one showing its location (see Figure 23 and Figure 24). According to aerial photographs, the Balloon House stood intact next to the WA & FC railway line as late as 1927.

The Signal Corps pursued other aviation technologies including the dirigible and the airplane in 1908. The dirigible passed its trials and became U.S. Army Dirigible Balloon No. 1 on 22 August 1908. The contractor, Thomas Scott Balwin, trained three Army lieutenants to fly the airship, Frank P. Lahm, Thomas E. Selfridge, and Benjamin D. Foulois. The Army made flights at Fort Myer only through 1909. In 1912 the Army condemned and sold the airship (Tierney 1965). The airplane, however, had more of an impact on Army aviation.

After a long period of disinterest and skepticism on the part of the War Department, the Army accepted the Wright Brothers' bid for the construction and testing of an airplane for military use. The tests began at Fort

Myer in September 1908. Orville Wright made his first flight September 7. On subsequent days he continued the flights, occasionally taking passengers one at a time, and setting endurance records nearly every day but ending in the famous fatal crash. According to (Kelly 1950), the 1908 schedule went something like this:

Sept. 7	 solo flight 				
Sept. 8	2) solo flight	11 min. 10 sec.			
·	3) solo flight	7 min. 34 sec.			
Sept. 9	4) solo flight	57 min. 25 sec.	57 "circles" of parade ground	endurance record	
•	5) solo flight	1 hr. 1 min. 15 sec.	55 "circles" of parade ground	endurance record	
	6) w/Lt. Lahm	6 min. 24 sec.	6 1/2 "circles"	end. rec. w/ passenger	
	,			1st serviceman to fly on a	
			military airplane		
Sept. 10	7) solo flight	1 hr. 5 min. 52 sec.	200 ft. altitude	endurance record	
Sept. 11	8) solo flight	1 hr. 10 min. 24 sec.	57 "circles" 2 figure eights	endurance record	
Sept. 12	9) w/Maj. Squier	9 min. 06 sec.		end. rec. w/ passenger	
•	10) solo flight	1 hr. 15 min.	300 ft. altitude, 71 "circles"	endurance record	
Sept. 17	11) w/Lt. Selfridge	3 min. 30 sec.	3 1/2 "circles" FATAL CRASH	1st aviation fatality	
F	,			1st military aviation	
			fatality		

fatality

With the death of passenger Lt. Selfridge, the injuries to Orville Wright, and the damage to the airplane, testing of the Wright plane ended for the year. Orville returned the following year to complete the tests with a modified plane (see Figure 25). The highlight of the 1909 tests was a ten-mile cross-country flight that was to average a minimum of 40 miles per hour with a passenger. Lt. Foulois accompanied Wright, and they made the trip to Alexandria and back of just over 10 miles at an average speed of 43 miles per hour. The Army formally accepted the airplane on 2 August 1909 (Ball 1959). These historic events occurred on the original parade/drill field that included the south end of what is now Summerall Field a large open space stretching to the wall of Arlington National Cemetery south of the old hospital.

Fort Myer (1920s-1940s)

Only a few significant landscape changes occurred during the final years of Fort Myer as a Cavalry Post. These include a 1920s equestrian training facility for Olympic entrants that stood just east of building 59⁷; the construction of a series of buildings in the 1930s; and the construction of Marshall Drive in the 1940s. Temporary housing built for the mobilization of troops during both World Wars is no longer in evidence.

Certain Olympic sports historically have attracted entrants from the Army. These include shooting, the modern pentathlon, and the equestrian events. In the 1920s, Fort Myer became the main training ground for Olympic equestrian entrants (see Figure 26). A 1924 description of Army posts described it in this way,

...equitation, after all, is the thing and it is primarily to Fort Myer that the Army looks for its Olympic entrants to put the United states to the fore in horsemanship and horsemastership. Big civilian owners of blooded stock have been patriotic in striving to improve Army strains, and the American Remount Association has taken particular interest in efforts to provide adequate mounts for the approaching games at Paris. Fort Myer will be the center of equitation trials and training (Army 1924).

The equestrian training area at Fort Myer is no longer visible, but the continued commitment to cavalry training in the 1920s and 1930s kept the area south of today's Summerall Field an open and free of development.

The 1930s brought a government sponsored construction effort. Today, 26 buildings at Fort Myer date to the 1930s. These include Non-Commissioned Officers' quarters along Sheridan Avenue (Buildings 426-432,

⁷ The site is currently occupied by the parking lots of the Old Post chapel and the Tri-Service Parking Lot.

435, 439); Conmy Hall (Building 241); the Old Chapel (Building 335); the Scout Building (Building 55); a series of Officers' Quarters along Lee Avenue (Buildings 19-22, 28); and two shops on the lower post (Buildings 311 and 312). The Army built a new riding hall in 1934 to replace the original building that was destroyed by fire.

In the 1940s, the general circulation pattern of the post changed dramatically with the construction of Marshall Drive. Traffic entering the post from the Wright Gate now had the option of driving up the hill of Whipple Field to the intersection of Grant and Jackson Avenues. With the construction of Memorial Bridge across the Potomac River, completed in 1932, traffic through this gate likely increased. It is unclear when the Army closed the Tassin Gate⁸ and Washington Avenue, but this action rendered Marshall Drive the main entrance to the historic portion of the post.

New Deal programs of the 1930s resulted in a construction boom on Army installations. Installations increased in size as training areas expanded. At Fort Myer, new officer housing resulted. The NCO housing on Sheridan Avenue represents the effort to improve installations nation-wide. The Georgian and Colonial Revival elements of these buildings are typical of the construction on Army installations during this era.

The significance of the landscape change during this period is the continuation of patterns established in earlier landscape decisions. The officers' quarters built on Lee Avenue mirror and complement earlier construction. The NCO (Non-Commissioned Officer) quarters along Sheridan Avenue contribute to the urban aesthetic established through earlier construction. The Old Chapel provides a strong link with Arlington Cemetery, an integral part of Fort Myer's history and contemporary mission.

Influence of the Cavalry Period on the Landscape of Fort Myer

The main influences of the Cavalry Period on the landscape of Fort Myer can be summarized as follows:

- General Post Layout: construction during this period firmly established the general layout of the historic north area of the post as it exists today. The construction of the Lower Post, the establishment of the railway line, and the expansion to the south led to the general shape of the installation and some of its basic circulation patterns today. The construction of NCO housing in the 1930s extended the developed portion of the post south on Sheridan Avenue.
- Preservation of the City View: the reconstruction of the Whipple Field Officers' Quarters in an orientation facing the view of the City of Washington, DC reflects the importance of the topography to the design decision process as well as the importance of Fort Myer's proximity to the Capital City.
- Establishment of an Urban Aesthetic: The densely planted street trees, sidewalks, and street-facing officers' quarters along Grant Avenue, Jackson Avenue, and Lee Avenue give the post a decidedly urban feel.
- Victorian Architecture and Landscape Architecture Aesthetic: The new construction during this period
 reflects late Victorian architecture and landscape architecture (see Figure 15). Consistent with trends in
 Victorian architecture, buildings are less ornate than their frame predecessors. Historic photographs show
 that landscape treatments included an increase in foundation plantings. The yards had grass lawns, shrubs,
 large shade trees in lawns, and in some cases, ornamental garden urns that accentuated the approaches to the
 quarters.
- Georgian and Colonial Revival Architecture: New construction of NCO housing in the 1930s established elements of Georgian and Colonial Revival architectural styles at Fort Myer.

⁸ It appears that the gate remained open into the 1970s. The National Register Historic District Nomination Form for Fort Myer includes the Tassin Gate and it is noted on a 1976 map. There is no trace of the Gate today, described in 1937 as "two brick entrance pillars surmounted with bronze eagles" (WPA 1937), but the bronze Eagles that today sit atop the Wright Gate maybe have been transferred from the Tassin Gate.

Summary of Landscape Areas

The legacy of the Cavalry Period and the return of the Signal Corps to Fort Myer are seen in several landscape areas (see Figure 28):

- The Lower Post Area: originally built as a Signal Corps cantonment between 1899 and 1910; site of a tall "Balloon House" for observation balloons; from 1931 to the 1940s became home to the Machine Gun Troop of the 10th Cavalry, a unit of black soldiers.
- Pasture/Picnic Area: used as an area to exercise horses; current road bed originally built and used by the Washington Arlington & Falls Church Railway, an electric passenger train service that operated from the late 1890s into the 1920s.
- Stables Area: site of civil War Fort Cass, built in 1861; stables built in the 1890s and 1900s after the Army designated Fort Myer a cavalry post.
- Summerall Field / Wright Brothers site: today represents the north end of what was a much larger
 historic training area; site of the 1908 and 1909 Wright Brothers airplane trials; currently used as a parade
 ground and ceremonial space.
- Lee Avenue Officers' Quarters: most of the buildings on the east side of the street date 1896, those on the east side to the 1930s; it is noteworthy that the 1896 buildings face the street and not the parade ground (Summerall Field), as is more common of Army installations of that time period; as a result, Lee Avenue possesses a more urban, residential character.
- Whipple Field Officers' Quarters: constructed of brick, Quarters 1 and 2 date to 1899 and were originally the commanding officer's quarters for the Signal Corps cantonment of the Lower Post. Quarters 5 and 8 date to 1903, Quarters 6 and 7 date to 1908 and 1909 respectively. When built, Quarters 5 through 8 replaced a row of five frame quarters, four of which had stood since 1876. In 1910, Quarters 1 became home to the Army Chief of Staff.
- Jackson Avenue Quarters: officer housing built directly on the site of Fort Whipple between 1892 and 1908; recreation area to the north occupies the site of Fort Whipple (1863), later the parade ground for the first Signal Corps cantonment (1868-1886).
- Barracks Area: the first two buildings to the north, 246 and 247, date to 1895, the nest two, 248 and 249 the date to 1903, buildings 250 dates to 1908 followed by building 251 which dates to 1934.
- NCO Housing Area: a continuation of the urban aesthetic along Sheridan Avenue. Sidewalks and street
 trees create a visual link with the barracks area. These buildings represent the 1930s New Deal construction
 boom on Army installations.



Figure 19. Railroad station with hospital in background c. 1896-1910 (Library of Congress, Prints and Photographs Division, Daniel French Collection, Lot 12359-1, LC USZ62-48670).



Figure 20. Quarters 11 and 12 with the old Signal Corps School "Observatory" centered behind, 1876 (National Archives and Records Administration, Still Picture Branch, RG-92-F-45, Virginia-General, Drawer 45).

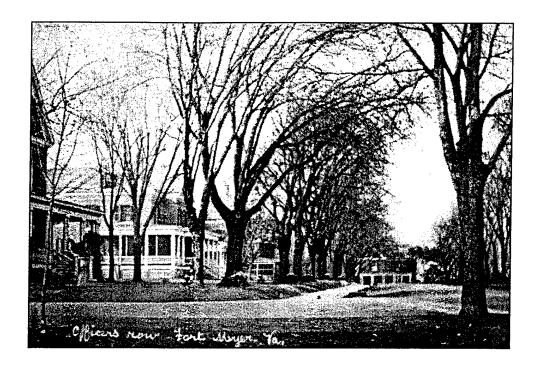




Figure 21. Example of Fort Myer streetscape c. 1910-1915, Grant Avenue (top), Lee Avenue (bottom) (Library of Congress, Prints and Photographs Division, Daniel French Collection, Lot 12359-1, LC USZ62-48672-48692).

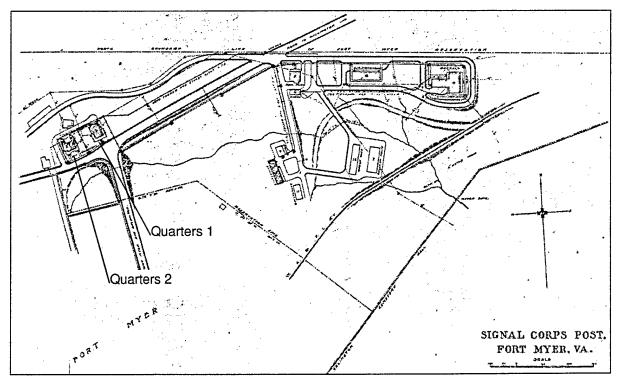
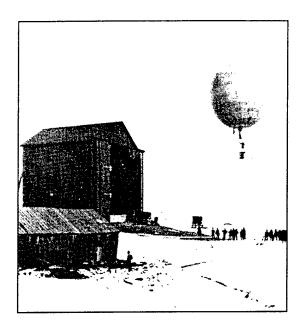


Figure 22. Map showing signal Corps Post and boundary in 1905. Note that Quarters 1 and 2 are part of the signal Corps Post (Army Chief of Staff 1905).



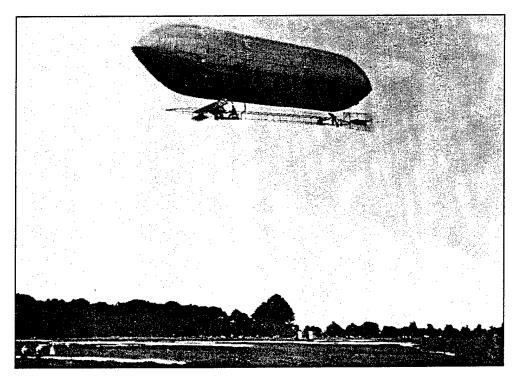


Figure 23. Signal Corps Balloon taking flight, almost certainly at Fort Myer, c. 1907-1908 (top); U.S. Army Dirigible No. 1 above Fort Myer, August 1908, Arlington Cemetery in background (both images reproduced in M. Marshall 1965).

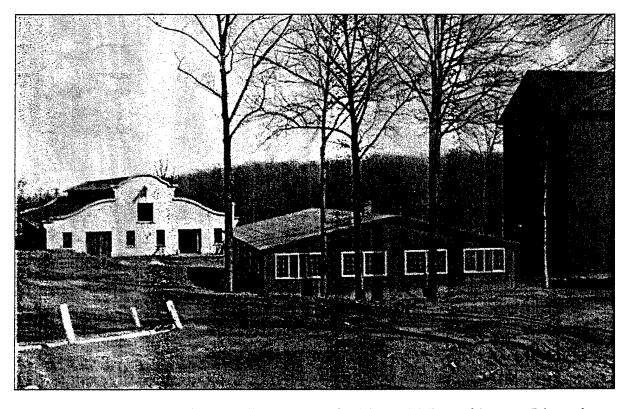


Figure 24. View of Lower Post showing Balloon House on far right, 1918 (Library of Congress, Prints and Photographs Division, Lot 8271, LC USZ62-43527).

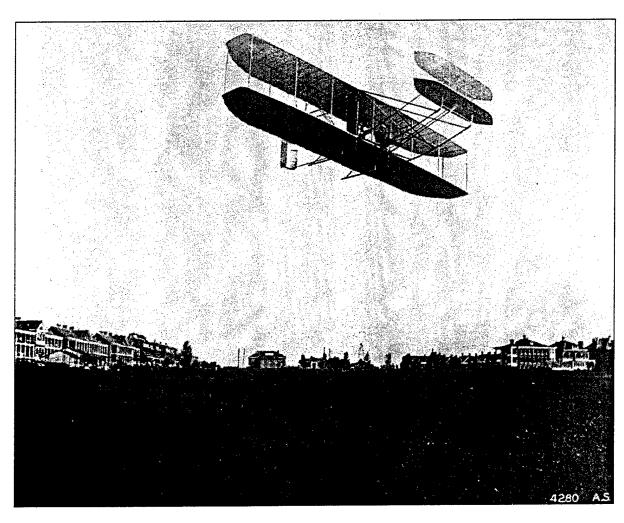


Figure 25. Orville Wright at Fort Myer, 1909 (Martin Luther King, Jr. Library, Washington, DC, Washingtoniana Room).



Figure 26. Equestrian excellence at Fort Myer in the 1920s (U.S. Army Posts 1925).

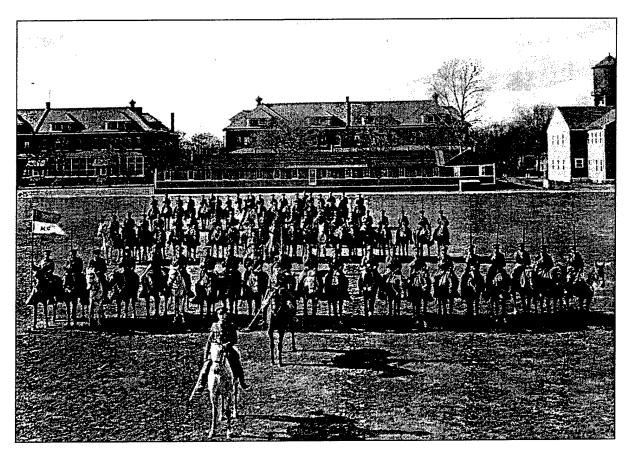


Figure 27. The Machine Gun Troop of the Tenth Cavalry on Summerall Field, 1931 (Martin Luther King, Jr. Library, Washington, DC, Washingtoniana Room).

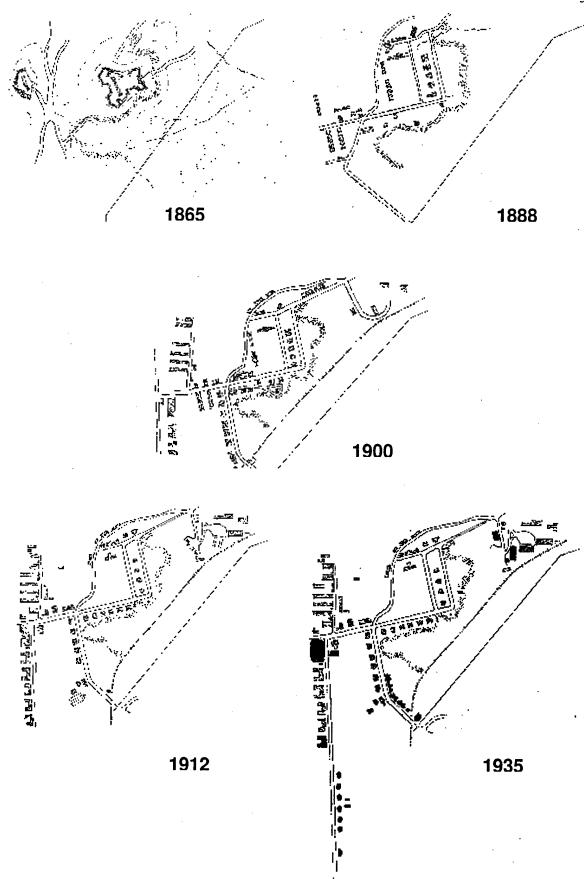


Figure 28. Maps showing changes at Fort Myer over time (drawings by Professor Gary Kesler for USACERL based on information from several maps and photographic sources).

Historic District Boundary Considerations

The current historic boundary, as defined by the 1974 National Register Historic District Nomination (NPS 1974), is largely based on an assessment of the history and architecture of the Fort Myer buildings. This report demonstrates the significant relationship between the natural topography and the general plan of the post. Furthermore, this report describes certain areas crucial to understanding the historical character and setting of Fort Myer that are not included in the current historic district boundary. These are as follows:

- Whipple Field
- Pasture/Picnic Area (with Old Chapel)
- The Lower Post Area
- Barracks Area extended
- NCO Housing Area

The rational for these inclusions follows. Whipple Field defines the reason Fort Myer is located where it is, both for its role as Fort Whipple in the defense of Washington, DC during the Civil War and as a point for signal practice for the Signal School. Furthermore, the view of Washington, DC from Whipple Field influenced the orientation of buildings and the general layout of the post. The Pasture/Picnic Area and McNair Road form the site of the electric railway that served the post from the 1890s into the 1920s. The wooded area reflects the association of the post with the Arlington Estate. The Lower Post contains a number of significant buildings, is associated with the Signal Corps' aviation activity, and was home to the famous Machine Gun Troop of the 10th Cavalry. The Barracks Area should be extended to include building 251. The NCO Housing Area, the stretch of Sheridan Avenue from the barracks to and including buildings 426-435 should also be included. This area dates from the 1930s and reflects the expansion of the post south between the wars. It dates from the New Deal construction boom, an effort to improve installations nation-wide. The Georgian and Colonial Revival elements of these buildings provide an excellent example of the construction on Army installations during this era. Furthermore, the urban residential feeling established along Grant, Lee, and Jackson Avenues is enhanced along Sheridan Avenue.

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Virginia Room, Arlington County Library

Appendix A: Trees at Fort Myer

	EXISTINGTREES				
	Common Name	Scientific Nume		Common Name	Scientific Name
1	Arborvitae, Eastern	Thuja occidentalis	42	Magnolia, Southern	Magnolia grandiflora
2	Ash, Black	Fraxinus nigra	43	Maidenhair Tree	Ginkgo biloba
3	Birch, River	Betula nigra	44	Maple, Boxelder	Acer negundo
4	Birch, Yellow	Betula lutea or B. alleghaniensis	45	Maple Norway	Acer platanoides
5	Buckeye, Yellow	Aesculus octandra	46	Maple, Red	Acernibrum
6	Catalpa, Southern	Catalpa bignoniodes	47	Maple, Silver	Acer saccarinum
7	Cedar, Atlas	Cedrus atlantica	48	Maple, Sugar	Acer saccarum
8	Cedar, red	Juniperus virginiana	49	Mulberry, Red	Morus rubra
9	Cherry, Black	Prunus cerotina	50	Mulberry, White	Morus alba
_	Cherry, Kwanzan	Prunus serrulata 'Kwanzan'	51	Oak, Black	Quercus velutina
	Cherry, Omamental	Prunus yedoensis	52	Oak, Burr	Quercus macrocarpa
-+	Cherry, Weeping	Prunus subhintella	53	Oak, Chestnut	Quercus prinus (montana)
\rightarrow	Chestnut, Japanese	Castanea crenata	54	Oak, Pin	Quercus palustris
4	Chabapple, Flowering	Malus ficribunda	55	Oak, Red	Quercus borealis (rubra)
5	Crapernyitle	Lagerstroemia indica		Oak, Scarlet	Quercus coccinea
	Cypress, Sawara Flase	Charmecyparis pisifera squarrosa	57	Oak, Swamp White	Quercus bicolor
7	Dogwood, Eastern	Cornus florida	58	Oak, White	Quercus alba
8	Elm, American	Umus americana	59	Oak, Willow	Quercos phellos
9	Elm, Dutch	Umus x hollandica	60	Osage Orange	Maclura pornifera
0	Elm, Slippery	Ums fulva		Pagoda Tree, Japanese	Sophora japonica
1	Fir, Douglas	Pseudotsuga taxifolia (menziesii)	62	Pear, Bradford	Pyrus calleryana Bradford
2	Goldenrain tree	Keolreuteria paniculata	63	Pine, Austrian	Pinus nigra
3	Hackberry	Celtis occidentalis		Pine, Japanese Black	Pinus thunbergiana
4	Hawthorne, Cockspur	Crataegus crusgalli		Pine, Scotch	Pinus sylvestris
5	Hawthome, Washington	Crataegus phaenopyrum	66	Pine, Shortleaf	Pinus echinata
6	Hemlock, Canadian	Tsuga canadensis		Pine, Virginia	Pinus virginiana
7	Herricck, Mountain	Tsuga mertensiana		Pine, White	Pinus strobus
	Hickory, Bitternut	Carya cordiformis		Redbud, Eastern	Cercis canadensis
9	Hickory, Shagbark	Carya ovata	-	Spruce, Colorado	Picea pungens
0	Holly, American	Ilex opaca		Spruce, Colorado Blue	Picea pungens var. glauca
-+	Holly, Wilson	Ilex x altaclarensis 'Wison'		Spruce, Norway	Piceas abies
2	Hop Hombeam, American	Ostrya viginiana		Spruce, White	Picea glauca
3	Hombeam	Carpinus caroliniana		Sweet Gum	Liquidambar styraciflua
4]	Horsechestnut	Aesulus hippocastarum		Sycamore, American	Platanus occidentalis
5	Kentucky Coffee Tree	Cymocladus dioicus		Tree of Heaven	Ailanthus altissima
6.	luniper, Pfitzer's	Juniperus chinensis 'Pfitzer'		Tuliptree	Liriodendron tulipifera
7	Linden American	Tilia arrericana		Tupelo, Black	Nyssa sylvatica
8]	Linden, Littleleaf	Tilia cordata		Walnut, Black	Juglans nigra
9]	Locust, Black	Robinia pseudoacacia		Willow, Black	Salix nigra
0 1	.coust, Thornless Honey	Gleditsia triacanthos inermis	81	Willow, Weeping	Salix babylonica
ī	Vagnolia, Saucer	Magnolia soulangeana	82	Yellow Wood	Clasdrastis lutea

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